



Frank O'Bannon  
Governor

Lori F. Kaplan  
Commissioner

August 26, 2003

100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
[www.in.gov/idem](http://www.in.gov/idem)

TO: Interested Parties / Applicant

RE: Fountain Foundry Corporation / T045-6006-00001

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

### Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and

- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency  
401 M Street  
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

# **PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY**

**Fountain Foundry Corporation  
215 East VanBuren Street  
Veedersburg, Indiana 47987**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T045-6006-00001	
Issued by: Original Signed by Janet McCabe Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: August 26, 2003  Expiration Date: August 26, 2008

## TABLE OF CONTENTS

### A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(15)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2] [326 IAC 2-7-5(15)]

### B GENERAL CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]
- B.3 Enforceability [326 IAC 2-7-7]
- B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]
- B.5 Severability [326 IAC 2-7-5(5)]
- B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]
- B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]
- B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]
- B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]
- B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)]  
[326 IAC 1-6-3)]
- B.12 Emergency Provisions [326 IAC 2-7-16]
- B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]
- B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination  
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]
- B.17 Permit Renewal [326 IAC 2-7-4]
- B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]
- B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]  
[326 IAC 2-7-12(b)(2)]
- B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
- B.21 Source Modification Requirement [326 IAC 2-7-10.5]
- B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]
- B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
- B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]

### C SOURCE OPERATION CONDITIONS

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than  
One Hundred (100) pounds per hour [40 CFR 52 Subpart P] [326 IAC 6-3-2]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Operation of Equipment [326 IAC 2-7-6(6)]
- C.7 Stack Height [326 IAC 1-7]
- C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

#### Testing Requirements [326 IAC 2-7-6(1)]

- C.9 Performance Testing [326 IAC 3-6]

#### Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

**Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

- C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]
- C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11]  
[326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

- C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
- C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports  
[326 IAC 2-7-5] [326 IAC 2-7-6]
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

- C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]  
[326 IAC 2-6]
- C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
- C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

**Stratospheric Ozone Protection**

- C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

**D.1 FACILITY OPERATION CONDITIONS - Scrap and Charge Handling Process  
Emission Limitations and Standards [326 IAC 2-7-5(1)]**

- D.1.1 Particulate (PM) [326 IAC 6-3-2]
- D.1.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

**D.2 FACILITY OPERATION CONDITIONS - Cupola  
Emission Limitations and Standards [326 IAC 2-7-5(1)]**

- D.2.1 Particulate (PM) [326 IAC 6-3-2]
- D.2.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]
- D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
- D.2.5 Emission Controls

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- D.2.6 Visible Emissions Notations
- D.2.7 Temperature Monitoring
- D.2.8 Baghouse Parametric Monitoring
- D.2.9 Baghouse Inspections
- D.2.10 Broken Bag or Failed Bag Detection

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

- D.2.11 Record Keeping Requirements
- D.2.12 Reporting Requirements

**D.3 FACILITY OPERATION CONDITIONS - Electric Induction Furnace Charging and  
Melting  
Emission Limitations and Standards [326 IAC 2-7-5(1)]**

- D.3.1 Particulate (PM) [326 IAC 6-3-2]
- D.3.2 Prevention of Significant Deterioration [326 IAC 2-2]

- D.4 FACILITY OPERATION CONDITIONS -** South pouring/casting pallet line, South castings cooling pallet line, South turntable pouring/casting, South turntable castings cooling, 2 shakeout systems, South sand handling all controlled by baghouse #1

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

- D.4.1 PM, PM10, and lead emissions [326 IAC 6-3-2]
- D.4.2 Particulate (PM) [326 IAC 6-3-2]
- D.4.3 VOC Emissions [326 IAC 8-1-6]
- D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.4.6 Emission Controls

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- D.4.7 Visible Emissions Notations
- D.4.8 Parametric Monitoring
- D.4.9 Baghouse Inspections
- D.4.10 Broken Bag or Failed Bag Detection

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

- D.4.11 Record Keeping Requirements

- D.5 FACILITY OPERATION CONDITIONS -** 14 cf shot blast machine, 34 cf shotblast machine, Old Foundry sand handling all controlled by baghouse #2

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

- D.5.1 Particulate (PM) [326 IAC 6-3-2]
- D.5.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]
- D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.5.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.5.5 Particulate Control

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- D.5.6 Visible Emissions Notations
- D.5.7 Parametric Monitoring
- D.5.8 Baghouse Inspections
- D.5.9 Broken Bag or Failed Bag Detection

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

- D.5.10 Record Keeping Requirements

- D.6 FACILITY OPERATION CONDITIONS -** Old foundry pouring/casting system, Old foundry castings cooling system, magnesium treatment process, and core making process

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

D.6.1 Particulate (PM) [326 IAC 6-3-2]

D.6.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

**D.7 FACILITY OPERATION CONDITIONS - Insignificant Activities  
Emission Limitations and Standards [326 IAC 2-7-5(1)]**

D.7.1 Particulate (PM) [326 IAC 6-3-2]

**Certification**

**Emergency Occurrence Report**

**Quarterly Report**

**Quarterly Deviation and Compliance Monitoring Report**

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

---

The Permittee owns and operates a stationary gray and ductile iron foundry.

Responsible Official:	Donald E. Craft, President
Source Address:	215 East VanBuren Street, Veedersburg, Indiana 47987
Mailing Address:	P.O. Box 188, Veedersburg, Indiana 47987
SIC Code:	3321
County Location:	Fountain
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD Rules Minor Source, Section 112 of the Clean Air Act Secondary Metal Production Facility which is one of the 28 listed source categories pursuant to 326 IAC 2-2 (PSD)

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

---

This stationary source consists of the following emission units and pollution control devices:

- (1) one (1) cupola charge handling operation, referred to as emission unit 120, constructed in 1960, with a maximum capacity of 9.0 tons per hour of metal, with emissions uncontrolled;
- (2) one (1) cupola melt furnace, referred to as emission unit 110, constructed in 1973, with a maximum melt rate of 9.0 tons of iron per hour, with emissions controlled by baghouse #4 and two natural gas-fired afterburners, with emissions exhausting to stack SC-4;
- (3) one (1) electric induction furnace charge handling operation, referred to as emission unit 145, constructed in 1994, with a maximum capacity of 1.5 tons per hour of metal, with emissions uncontrolled;
- (4) One (1) electric induction furnace system, referred to as emission unit 140, constructed in 1994 and modified with a second furnace shell added in 1998, with a maximum melting capacity of 1.5 tons of iron per hour, with emissions uncontrolled;
- (5) one (1) pouring line, referred to as the South pouring/casting pallet line and emission unit 415, constructed in 1989, with a maximum capacity of 3.2 tons of iron per hour and 24.32 tons of sand molds and cores per hour, with emissions uncontrolled and exhausting internally;
- (6) one (1) castings cooling line, referred to as the South pallet cooling line and emission unit 425, constructed in 1989, with a maximum capacity of 3.2 ton of iron per hour and 24.32 tons of sand molds and cores per hour, with emissions uncontrolled and exhausting internally;



- (7) one (1) pouring line, referred to as the South pouring/casting turntable and emission unit 410, constructed in 1989, with a maximum capacity of 4 tons of iron per hour and 30.4 tons of sand molds and cores per hour, with emissions controlled by baghouse #1 and exhausting to stack SC-1;
- (8) one (1) castings cooling line, referred to as the South castings cooling turntable and emission unit 420, constructed in 1989, with a maximum capacity of 4 tons of iron per hour and 30.4 tons of sand molds and cores per hour, with emissions controlled by baghouse #1 and exhausting to stack SC-1;
- (9) one (1) casting shakeout line, referred to as the Dideon rotary drum shakeout and emission unit 450, constructed in 1989, with a maximum capacity of 9 tons of iron per hour and 68.4 tons of sand per hour, with emissions controlled by baghouse #1 and exhausting to stack SC-1;
- (10) one (1) casting shakeout line, referred to as the shaker table system and emission unit 460, constructed in 1975, with a maximum capacity of 5 tons of iron per hour and 38 tons of sand molds and cores per hour, with emissions controlled by baghouse #2 and exhausting to stack SC-2;
- (11) one (1) sand handling system, referred to as the South sand system and emission unit 310, constructed in 1989, with a maximum capacity of 28.8 tons of sand per hour, with emissions controlled by baghouse #1 and exhausting to stack SC-1;
- (12) one (1) 14 cubic foot Wheelabrator shot blast machine, referred to as emission unit 510, constructed in 1971, with a maximum capacity of 2 tons of iron castings per hour, with emissions controlled by baghouse #2 and exhausting to stack SC-2;
- (13) one (1) 34 cubic foot Wheelabrator shot blast machine, referred to as emission unit 520, constructed in 1975, with a maximum capacity of 5.6 tons of iron castings per hour, with emissions controlled by baghouse #2 and exhausting to stack SC-2;
- (14) one (1) sand handling system, referred to as the Old Foundry sand system and emission unit 330, constructed in 1960, with a maximum capacity of 5.8 tons of sand per hour, with emissions controlled by baghouse #2 and exhausting to stack SC-2;
- (15) one (1) pouring system, referred to as the Old Foundry pouring/casting system and emission unit 430, constructed in 1960 and partially relocated in 1998, with a maximum capacity of 9 tons of iron per hour and 68.4 tons of sand molds and cores per hour, with emissions uncontrolled and exhausting internally;
- (16) one (1) castings cooling system, referred to as the Old Foundry cooling system and emission unit 440, constructed in 1960 and partially relocated in 1998, with a maximum capacity of 9 tons of iron per hour and 68.4 tons of sand molds and cores per hour, with emissions uncontrolled and exhausting internally;
- (17) one (1) magnesium treatment process, constructed in 1960, with a maximum capacity of 1.5 tons of iron per hour, with emissions uncontrolled;
- (18) the core making process including the following emission units:
  - (a) one (1) Pepset core machine, constructed in 1989, with a maximum capacity of 0.7 tons of cores per hour and 24 pounds of pepset resin per ton of sand, with emissions uncontrolled;
  - (b) three (3) shellcore machines, constructed prior to 1970, each with a maximum

capacity of 0.5 tons of cores per hour and 56 pounds of shell sand VTCA resin per ton of core sand when making shell sand cores, and each with a maximum capacity of 0.4 tons of cores per hour and 30 pounds of shell sand FTLH resin per ton of core sand when making warm box cores, with emissions uncontrolled;

- (c) one (1) shellcore machine, constructed prior to 1970, with a maximum capacity of 0.1 ton of cores per hour and 56 pounds of shell sand VTCA resin per ton of core sand when making shell sand cores, with emissions uncontrolled;
- (d) six (6) shellcore machines, constructed between 1977 and 1980, each with a maximum capacity of 0.5 tons of cores per hour and 56 pounds of shell sand VTCA resin per ton of core sand when making shell sand cores, and each with a maximum capacity of 0.4 tons of cores per hour and 30 pounds of shell sand FTLH resin per ton of core sand when making warm box cores, with emissions uncontrolled;
- (e) one (1) CO<sub>2</sub> mix core machine, constructed in 1969, with a maximum capacity of 0.1 tons of cores per hour and 80 pounds of CO<sub>2</sub> mix resin per ton of core sand, with emissions uncontrolled;
- (f) one (1) oilcore core making process, constructed in 1960, with a maximum capacity of 0.4 tons of cores per hour and 20 pounds of Lin oil resin per ton of core sand, with emissions uncontrolled;
- (g) two (2) warm box core machines, each with a maximum capacity of 540 pounds of cores per hour and 30 pounds of resin per ton of core sand, with emissions uncontrolled; and
- (h) core wash activities referred to as emission unit 290, constructed in 1960, with a maximum usage rate of 37.44 pounds of VOC per hour, with emissions uncontrolled.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(15)]

---

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) brazing, cutting, soldering, and welding; [326 IAC 6-3-2]
- (b) Four (4) grinders, referred to as emission unit 550, constructed in 1966, with a maximum capacity of 7.6 tons of iron castings per hour, with emissions controlled by baghouse #2 and exhausting to stack SC-2; [326 IAC 6-3-2] and
- (c) woodworking equipment used to make tooling patterns. [326 IAC 6-3-2]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

---

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22); and
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## SECTION B

## GENERAL CONDITIONS

### B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

### B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

### B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

### B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

### B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

### B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

### B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) As provided in 326 IAC 2-7-5(6), the Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) Noncompliance with any provision of this permit, except any provision specifically

designated as not federally enforceable, constitutes a violation of the Clean Air Act.

- (c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

**B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]**

---

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

**B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]**

---

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

- (2) The compliance status;
- (3) Whether compliance was continuous or intermittent;
- (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
- (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]  
[326 IAC 1-6-3]

- 
- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee’s control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (d) To the extent the Permittee is required by 40 CFR 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

**B.12 Emergency Provisions [326 IAC 2-7-16]**

---

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,  
Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

**B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

---

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

**B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]**

---

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification



by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

**B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination**  
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

---

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

**B.17 Permit Renewal** [326 IAC 2-7-4]

---

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
  - (1) A timely renewal application is one that is:

- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]  
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]  
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

**B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]**

---

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

**B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]**

---

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes

for changes that are provided for in a Part 70 permit.

- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

**B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]**

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

**B.21 Source Modification Requirement [326 IAC 2-7-10.5]**

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

**B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]**

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

**B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]**

---

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]**

---

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source
---------------

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52, Subpart P] [326 IAC 6-3-2]

- (a) Pursuant to 40 CFR 52, Subpart P, particulate emissions from any process not already regulated by 326 IAC 6-1 or regulated by any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This condition is not federally enforceable.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

**C.7 Stack Height [326 IAC 1-7]**

---

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

**C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]**

---

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet

on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) Demolition and renovation  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) Indiana Accredited Asbestos Inspector  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

### **Testing Requirements [326 IAC 2-7-6(1)]**

#### **C.9 Performance Testing [326 IAC 3-6]**

---

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

### **Compliance Requirements [326 IAC 2-1.1-11]**

#### **C.10 Compliance Requirements [326 IAC 2-1.1-11]**

---

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

### **Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**



**C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

---

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

**C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

---

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

**C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

---

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a temperature the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

**C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

---

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs)

consistent with safe operating procedures on September 13, 1999.

- (b) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (c) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.  
[326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

---

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the source must comply with the applicable requirements of 40 CFR 68.

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports  
[326 IAC 2-7-5] [326 IAC 2-7-6]

---

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
  - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
  - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.

- (c) The Permittee is not required to take any further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

**C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]**

---

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]  
[326 IAC 2-6]

---

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for the purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:
- Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

---

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

---

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

### **Stratospheric Ozone Protection**

#### **C.21 Compliance with 40 CFR 82 and 326 IAC 22-1**

---

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

one (1) cupola charge handling operation, referred to as emission unit 120, constructed in 1960, with a maximum capacity of 9.0 tons per hour of metal, with emissions uncontrolled.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Particulate (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate (PM) from the scrap and charge handling process (emission unit 120) shall not exceed 17.9 pounds per hour when operating at a process weight rate of 9.0 tons of metal per hour. The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

#### D.1.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

The following limits shall apply in order that the source maintain minor PSD status; therefore, the requirements of 326 IAC 2-2 (PSD) will not apply to units constructed after 1977.

- (a) The PM emissions from the cupola scrap and charge handling (emission unit 120) shall not exceed 0.60 pounds per ton of metal melted in the cupola.
- (b) The PM<sub>10</sub> emissions from the cupola scrap and charge handling (emission unit 120) shall not exceed 0.36 pounds per ton of metal melted in the cupola.
- (c) The lead emissions from the cupola scrap and charge handling (emission unit 120) shall not exceed 0.0029 pounds per ton of metal melted in the cupola.

## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

one (1) cupola melt furnace, referred to as emission unit 110, constructed in 1973, with a maximum melt rate of 9.0 tons of iron per hour, with emissions controlled by baghouse #4 and two natural gas-fired afterburners, with emissions exhausting to stack SC-4.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Particulate (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate (PM) from the cupola melt furnace (emission unit 110) shall not exceed 17.9 pounds per hour when operating at a process weight rate of 9.0 tons of metal per hour. The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

#### D.2.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

The following limits shall apply in order that the source maintain minor PSD status; therefore, the requirements of 326 IAC 2-2 (PSD) will not apply to units constructed after 1977.

- (a) The particulate matter (PM) from the baghouse controlling the cupola melt furnace (emission unit 110) shall not exceed 0.207 pounds per ton of metal melted in the cupola.
- (b) The particulate matter less than 10 microns (PM<sub>10</sub>) from the baghouse controlling the cupola melt furnace (emission unit 110) shall not exceed 0.185 pounds per ton of metal melted in the cupola.
- (c) The carbon monoxide (CO) emissions from the cupola melt furnace (emission unit 110) shall not exceed 14.56 pounds per ton of metal melted in the cupola.
- (d) The SO<sub>2</sub> emissions from the cupola melt furnace (emission unit 110) shall not exceed 14.52 pounds per ton of metal melted in the cupola.
- (e) The VOC emissions from the cupola shall not exceed 0.18 pounds per ton of metal melted in the cupola.
- (f) The lead emissions from the baghouse controlling the cupola melt furnace (emission unit 110) shall not exceed 0.004 pounds per ton of metal melted in the cupola.
- (g) The amount of metal throughput to the cupola shall not exceed 13,600 tons of iron per twelve (12) consecutive month period with compliance demonstrated at the end of each month.

**D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

---

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the cupola, the cupola cap and the control devices.

**Compliance Determination Requirements**

**D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

---

Within 180 days after the first day of restarting operation of the cupola after the date of issuance of this Part 70 permit, the Permittee shall perform PM, PM10, and CO testing using methods as approved by the Commissioner, in order to demonstrate compliance with conditions D.2.1 and D.2.2. Restarting operation is considered to have occurred at the time that the cupola begins operation for any reason after the date of issuance of this Part 70 permit. These tests shall be repeated at least once every two and a half (2.5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

**D.2.5 Emission Controls**

---

- (a) The process weight rate of the cupola shall be less than 10 tons per hour; therefore, the requirements of 326 IAC 9-1 (Carbon Monoxide Emission Limits) shall not apply.
- (b) The baghouse for particulate control and the two afterburners for CO control shall be in operation and control emissions from the cupola at all times that the cupola is in operation and during startup of the cupola.

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

**D.2.6 Visible Emissions Notations**

---

- (a) Visible emission notations of the cupola stack exhaust and of the charge door emissions shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.



#### D.2.7 Temperature Monitoring

---

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the cupola for measuring temperature of the cupola gas stream. The output of this system shall be recorded as an hourly average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the hourly average temperature of the cupola gas stream is below 1300 °F. This minimum temperature requirement applies at all times during cupola operation, except for the following:
- (1) periods when the cupola blast air is turned off;
  - (2) periods when the blast air has been turned on for less than 30 consecutive minutes; and
  - (3) during the last 30 minutes of operation of the cupola.

An hourly average temperature that is below 1300 °F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

The Permittee shall monitor the times that the cupola blast air is turned on and off.

- (b) The Permittee shall determine the hourly average temperature from the most recent valid stack test that demonstrates compliance with limits in condition D.2.2, as approved by IDEM.
- (c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the hourly average temperature of the cupola gas stream is below the hourly average temperature as observed during the compliant stack test. An hourly average temperature that is below the hourly average temperature as observed during the compliance stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

#### D.2.8 Baghouse Parametric Monitoring

---

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the cupola, at least once per shift when the cupola is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 18.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.2.9 Baghouse Inspections

---

An inspection shall be performed each calendar quarter of all bags controlling the cupola. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

#### D.2.10 Broken or Failed Bag Detection

---

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

### **Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

#### D.2.11 Record Keeping Requirements

---

- (a) To document compliance with Condition D.2.6, the Permittee shall maintain records of visible emission notations of the cupola stack exhaust and of the charge door emissions once per shift.
- (b) In order to document compliance with Condition D.2.8, the Permittee shall maintain records of the total static pressure drop once per shift during normal operation.
- (c) In order to document compliance with Condition D.2.9, the Permittee shall maintain records of the results of the inspections required under Condition D.2.9.
- (d) To document compliance with Condition D.2.7, the Permittee shall maintain records of the temperature of the cupola gas stream and the times when the cupola blast air is turned on and off.
- (e) In order to document compliance with Condition D.2.2(g), the Permittee shall maintain records of the amount of metal throughput to the cupola.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.2.12 Reporting Requirements

---

A quarterly summary of the information to document compliance with Condition D.2.2(g) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the

certification by the “responsible official” as defined by 326 IAC 2-7-1(34). **SECTION D.3**  
**FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

- (a) one (1) electric induction furnace charge handling operation, referred to as emission unit 145, constructed in 1994, with a maximum capacity of 1.5 tons per hour of metal, with emissions uncontrolled;
- (b) One (1) electric induction furnace system, referred to as emission unit 140, constructed in 1994 and modified with a second furnace shell added in 1998, with a maximum melting capacity of 1.5 tons of iron per hour, with emissions uncontrolled;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

**D.3.1 Particulate (PM) [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the following conditions shall apply:

- (a) The particulate (PM) from the electric induction furnace charge handling operation (emission unit 145) shall not exceed 5.4 pounds per hour when operating at a process weight rate of 1.5 tons of metal per hour.
- (b) The particulate (PM) from the electric induction furnace (emission unit 140) shall not exceed 5.4 pounds per hour when operating at a process weight rate of 1.5 tons of metal per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

**D.3.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]**

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

- (a) The combined PM emissions from the electric induction furnace charge handling process and the electric induction furnace shall not exceed 5.68 pounds per hour.
- (b) The combined PM10 emissions from the electric induction furnace charge handling process and the electric induction furnace shall not exceed 3.40 pounds per hour.
- (c) The combined lead emissions from the electric induction furnace charge handling process and the electric induction furnace shall not exceed 0.135 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) shall not apply.

## SECTION D.4

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (a) one (1) pouring line, referred to as the South pouring/casting pallet line and emission unit 415, constructed in 1989, with a maximum capacity of 3.2 tons of iron per hour and 24.32 tons of sand molds and cores per hour, with emissions uncontrolled and exhausting internally;
- (b) one (1) castings cooling line, referred to as the South pallet cooling line and emission unit 425, constructed in 1989, with a maximum capacity of 3.2 tons of iron per hour and 24.32 tons of sand molds and cores per hour, with emissions uncontrolled and exhausting internally;
- (c) one (1) pouring line, referred to as the South pouring/casting turntable and emission unit 410, constructed in 1989, with a maximum capacity of 4 tons of iron per hour and 30.4 tons of sand molds and cores per hour, with emissions controlled by baghouse #1 and exhausting to stack SC-1;
- (d) one (1) castings cooling line, referred to as the South castings cooling turntable and emission unit 420, constructed in 1989, with a maximum capacity of 4 tons of iron per hour and 30.4 tons of sand molds and cores per hour, controlled by baghouse #1 and exhausting to stack SC-1;
- (e) one (1) casting shakeout line, referred to as the Dideon rotary drum shakeout and emission unit 450, constructed in 1989, with a maximum capacity of 9 tons of iron per hour and 68.4 tons of sand per hour, with emissions controlled by baghouse #1 and exhausting to stack SC-1; and
- (f) one (1) sand handling system, referred to as the South sand system and emission unit 310, constructed in 1989, with a maximum capacity of 28.8 tons of sand per hour, with emissions controlled by baghouse #1 and exhausting to stack SC-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.4.1 PM, PM10, and Lead Emissions [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

- (a) The PM emissions from the baghouse #1 controlling the South pouring/casting turntable (emission unit 410), the South castings cooling turntable (emission unit 420), the Dideon rotary drum shakeout (emission unit 450), and the sand handling system (emission unit 310) shall not exceed 5.51 pounds per hour.
- (b) The PM10 emissions from the baghouse #1 controlling the South pouring/casting turntable (emission unit 410), the South castings cooling turntable (emission unit 420), the Dideon rotary drum shakeout (emission unit 450), and the sand handling system (emission unit 310) shall not exceed 12.04 pounds per hour.
- (c) The lead emissions from the baghouse #1 controlling the South pouring/casting turntable (emission unit 410), the South castings cooling turntable (emission unit 420), the Dideon rotary drum shakeout (emission unit 450), and the sand handling system (emission unit 310) shall not exceed 0.074 pounds per hour.
- (d) The PM emissions from the south pallet line pouring shall not exceed 4.20 pounds per

ton of castings.

- (e) The PM<sub>10</sub> emissions from the south pallet line pouring shall not exceed 2.06 pounds per ton of castings.
- (f) The PM emissions from the south pallet line cooling shall not exceed 1.40 pounds per ton of castings
- (g) The PM<sub>10</sub> emissions from the south pallet line cooling shall not exceed 1.40 pounds per ton of castings.
- (h) The lead emissions from the south pallet line pouring shall not exceed 0.02 pound per ton of castings.

Therefore, the requirements of 326 IAC 2-2 (PSD) shall not apply.

#### D.4.2 Particulate (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the following conditions shall apply:

- (a) The particulate (PM) from the South pouring/casting pallet line (emission unit 415) shall not exceed 37.8 pounds per hour when operating at a process weight rate of 27.52 tons of metal castings and sand molds and cores per hour.
- (b) The particulate (PM) from the South castings cooling pallet line (emission unit 425) shall not exceed 37.8 pounds per hour when operating at a process weight rate of 27.52 tons of metal castings and sand molds and cores per hour.
- (c) The particulate (PM) from the South pouring/casting turntable (emission unit 410) shall not exceed 41.2 pounds per hour when operating at a process weight rate of 34.4 tons of metal castings and sand molds and cores per hour.
- (d) The particulate (PM) from the South castings cooling turntable (emission unit 420) shall not exceed 41.2 pounds per hour when operating at a process weight rate of 34.4 tons of metal castings and sand molds and cores per hour.
- (e) The particulate (PM) from the castings shakeout line (emission unit 450) shall not exceed 48.7 pounds per hour when operating at a process weight rate of 77.4 tons of metal castings and sand molds and cores per hour.
- (f) The particulate (PM) from the South sand system (emission unit 310) shall not exceed 39.0 pounds per hour when operating at a process weight rate of 28.8 tons of sand per hour.

The pounds per hour limitations for (a), (b), and (f) were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

The pounds per hour limitations for (c), (d), and (e) were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55 P^{0.11} - 40$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

#### D.4.3 VOC Emissions [326 IAC 8-1-6]

In order to render the requirements of 326 IAC 8-1-6 (BACT) not applicable, the VOC emissions from the South pallet line pouring and cooling process, the south turntable pouring and cooling process, and the Dideon rotary drum shakeout process shall not exceed a combined total of 5.68 pounds per hour. Compliance with this limit will render the requirements of 326 IAC 8-1-6 (BACT) not applicable to these facilities.

#### D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control devices of these facilities.

### Compliance Determination Requirements

#### D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 180 days after the issuance of this permit, the Permittee shall perform PM and PM10 testing on the baghouse #1 controlling the South pouring/casting turntable (emission unit 410), the South castings cooling system (emission unit 420) the castings shakeout line (emission unit 450), and the sand handling system (emission unit 310) using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.4.1. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensable emissions. Testing shall be conducted in accordance with Section C - Performance Testing.

#### D.4.6 Emission Controls

The baghouse for PM and PM10 control shall be in operation and control emissions from the South turntable pouring/casting process, the South castings cooling turntable (emission unit 420) the shakeout line, and the South sand handling process at all times when each of these processes are in operation.

### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.4.7 Visible Emissions Notations

- (a) Visible emission notations of the baghouse #1 stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take

response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

#### D.4.8 Parametric Monitoring

---

The Permittee shall record the total static pressure drop across the baghouse #1 used in conjunction with the South turntable pouring/casting process, South turntable castings cooling process, the shakeout line, and the South sand handling process, at least once per shift when each of these processes is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.4.9 Baghouse Inspections

---

An inspection shall be performed each calendar quarter of all bags controlling the South turntable pouring/casting process, South turntable castings cooling process, the shakeout line, and the South sand handling process. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

#### D.4.10 Broken or Failed Bag Detection

---

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

**Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.4.11 Record Keeping Requirements**

---

- (a) In order to document compliance with Condition D.4.7, the Permittee shall maintain records of visible emission notations of the baghouse #1 stack exhaust(s) once per shift.
- (b) In order to document compliance with Condition D.4.8, the Permittee shall maintain records of the total static pressure drop once per shift during normal operation.
- (c) In order to document compliance with Condition D.4.9, the Permittee shall maintain records of the results of the inspections required under Condition D.4.9.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.



## SECTION D.5

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (a) one (1) 14 cubic foot Wheelabrator shot blast machine, referred to as emission unit 510, constructed in 1971, with a maximum capacity of 2 tons of iron castings per hour, with emissions controlled by baghouse #2 and exhausting to stack SC-2;
- (b) one (1) 34 cubic foot Wheelabrator shot blast machine, referred to as emission unit 520, constructed in 1975, with a maximum capacity of 5.6 tons of iron castings per hour, with emissions controlled by baghouse #2 and exhausting to stack SC-2;
- (c) one (1) casting shakeout line, referred to as the shaker table system and emission unit 460, constructed in 1975, with a maximum capacity of 5 tons of iron per hour and 38 tons of sand molds and cores per hour, with emissions controlled by baghouse #2 and exhausting to stack SC-2;
- (d) one (1) sand handling system, referred to as the Old Foundry sand system and emission unit 330, constructed in 1960, with a maximum capacity of 5.8 tons of sand per hour, with emissions controlled by baghouse #2 and exhausting to stack SC-2; and

### Insignificant Activity

- (e) Four (4) grinders, referred to as emission unit 550, constructed in 1966, with a maximum capacity of 7.6 tons of iron castings per hour, with emissions controlled by baghouse #2 and exhausting to stack SC-2.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

## Emission Limitations and Standards [326 IAC 2-7-5(1)]

### D.5.1 Particulate (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the following conditions shall apply:

- (a) The particulate (PM) from the 14 cubic foot Wheelabrator shot blast machine (emission unit 510) shall not exceed 6.5 pounds per hour when operating at a process weight rate of 2 tons of metal castings per hour.
- (b) The particulate (PM) from the 34 cubic foot Wheelabrator shot blast machine (emission unit 520) shall not exceed 13.0 pounds per hour when operating at a process weight rate of 5.6 tons of metal castings per hour.
- (c) The particulate (PM) from the castings shaker table (emission unit 460) shall not exceed 43.2 pounds per hour when operating at a process weight rate of 43 tons of metal castings and sand molds and cores per hour.
- (d) The particulate (PM) from the old foundry sand handling system (emission unit 330) shall not exceed 13.3 pounds per hour when operating at a process weight rate of 5.8 tons of sand per hour.
- (e) The particulate (PM) from the grinders (emission unit 550) shall not exceed a combined limit of 15.96 pounds per hour when operating at a process weight rate of 7.6 tons of metal castings per hour.

The pounds per hour limitations for (a), (b), (d), and (e) were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

The pounds per hour limitation for (c) was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

#### D.5.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

The following limits shall apply in order that the source maintain minor PSD status; therefore, the requirements of 326 IAC 2-2 (PSD) will not apply to units constructed after 1977.

- (a) The particulate matter (PM) from the baghouse #2 controlling the 14 cubic foot Wheelabrator shot blast machine (emission unit 510), the 34 cubic foot Wheelabrator shot blast machine (emission unit 520), the castings shaker table (emission unit 460), the grinders (emission unit 550), and the old foundry sand handling system (emission unit 330) shall not exceed 1.55 pounds per hour.
- (b) The PM<sub>10</sub> from the baghouse #2 controlling the 14 cubic foot Wheelabrator shot blast machine (emission unit 510), the 34 cubic foot Wheelabrator shot blast machine (emission unit 520), the castings shaker table (emission unit 460), the grinders (emission unit 550), and the old foundry sand handling system (emission unit 330) shall not exceed 8.49 pounds per hour.
- (c) The lead emissions from the baghouse #2 controlling the 14 cubic foot Wheelabrator shot blast machine (emission unit 510), the 34 cubic foot Wheelabrator shot blast machine (emission unit 520), the castings shaker table (emission unit 460), the grinders (emission unit 550), and the old foundry sand handling system (emission unit 330) shall not exceed 0.0047 pounds per hour.

#### D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control devices of these facilities.

### **Compliance Determination Requirements**

#### D.5.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 180 days after the issuance of this permit, the Permittee shall perform PM and PM<sub>10</sub> testing on the baghouse #2 controlling the 14 cubic foot Wheelabrator shot blast machine (emission unit 510), the 34 cubic foot Wheelabrator shot blast machine (emission unit 520), the castings shaker table (emission unit 460), the grinders (emission unit 550), and the old foundry sand handling system (emission unit 330) using methods as approved by the Commissioner, in order to demonstrate compliance with conditions D.5.1 and D.5.2. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM<sub>10</sub> includes filterable and condensable emissions. Testing shall be conducted in accordance with

## Section C - Performance Testing.

### D.5.5 Particulate Control

---

The baghouse #2 for PM control shall be in operation and control emissions from the 14 cubic foot Wheelabrator shot blast machine (emission unit 510), the 34 cubic foot Wheelabrator shot blast machine (emission unit 520), the castings shaker table (emission unit 460), the grinders (emission unit 550), and the old foundry sand handling system (emission unit 330) at all times when either of the shotblasters or the old foundry sand handling system is in operation.

## Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

### D.5.6 Visible Emissions Notations

---

- (a) Visible emission notations of the baghouse #2 stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

### D.5.7 Parametric Monitoring

---

The Permittee shall record the total static pressure drop across the baghouses #2 used in conjunction with the shotblasters (emission units 510 and 520), the castings shaker table (emission unit 460), the grinders (emission unit 550), and the old foundry sand handling system (emission unit 330), at least once per shift when the shotblasters and the old foundry sand handling system are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.5.8 Baghouse Inspections

---

An inspection shall be performed each calendar quarter of all bags controlling the shotblasters, the castings shaker table (emission unit 460), the grinders (emission unit 550), and the old foundry sand handling system (emission unit 330). Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

#### D.5.9 Broken or Failed Bag Detection

---

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

### **Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

#### D.5.10 Record Keeping Requirements

---

- (a) To document compliance with Condition D.5.6, the Permittee shall maintain records of visible emission notations of each of the baghouse stack exhausts once per shift.
- (b) To document compliance with Condition D.5.7, the Permittee shall maintain records of the total static pressure drop once per shift during normal operation.
- (c) To document compliance with Condition D.5.8, the Permittee shall maintain records of the results of the inspections required under Condition D.5.8.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.6

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (a) one (1) pouring system, referred to as the Old Foundry pouring/casting system and emission unit 430, constructed in 1960 and partially relocated in 1998, with a maximum capacity of 9 tons of iron per hour and 68.4 tons of sand molds and cores per hour, with emissions uncontrolled and exhausting internally;
- (b) one (1) castings cooling system, referred to as the Old Foundry cooling system and emission unit 440, constructed in 1960 and partially relocated in 1998, with a maximum capacity of 9 tons of iron per hour and 68.4 tons of sand molds and cores per hour, with emissions uncontrolled and exhausting internally;
- (c) one (1) magnesium treatment process, constructed in 1960, with a maximum capacity of 1.5 tons of iron per hour, with emissions uncontrolled.
- (d) the core making process including the following emission units:
  - (1) one (1) Pepset core machine, constructed in 1989, with a maximum capacity of 0.7 tons of cores per hour and 24 pounds of pepset resin per ton of sand, with emissions uncontrolled;
  - (2) three (3) shellcore machines, constructed prior to 1970, each with a maximum capacity of 0.5 tons of cores per hour and 56 pounds of shell sand VTCA resin per ton of core sand when making shell sand cores, and each with a maximum capacity of 0.4 tons of cores per hour and 30 pounds of shell sand FTLH resin per ton of core sand when making warm box cores, with emissions uncontrolled;
  - (3) one (1) shellcore machine, constructed prior to 1970, with a maximum capacity of 0.1 ton of cores per hour and 56 pounds of shell sand VTCA resin per ton of core sand when making shell sand cores, with emissions uncontrolled;
  - (4) six (6) shellcore machines, constructed prior to 1980, each with a maximum capacity of 0.5 tons of cores per hour and 56 pounds of shell sand VTCA resin per ton of core sand when making shell sand cores, and each with a maximum capacity of 0.4 tons of cores per hour and 30 pounds of shell sand FTLH resin per ton of core sand when making warm box cores, with emissions uncontrolled;
  - (5) one (1) CO<sub>2</sub> mix core machine, constructed in 1969, with a maximum capacity of 0.1 tons of cores per hour and 80 pounds of CO<sub>2</sub> mix resin per ton of core sand, with emissions uncontrolled;
  - (6) one (1) oilcore core making process, constructed in 1960, with a maximum capacity of 0.4 tons of cores per hour and 20 pounds of Lin oil resin per ton of core sand, with emissions uncontrolled;
  - (7) two (2) warm box core machines, each with a maximum capacity of 540 pounds of cores per hour, with emissions uncontrolled; and
  - (8) core wash activities referred to as emission unit 290, constructed in 1960, with emissions uncontrolled.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.6.1 Particulate (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the following conditions shall apply:

- (a) The particulate (PM) from the Old foundry pouring/casting system (emission unit 430) shall not exceed 48.7 pounds per hour when operating at a process weight rate of 77.4 tons of metal castings and sand molds and cores per hour.
- (b) The particulate (PM) from the Old foundry castings cooling system (emission unit 440) shall not exceed 48.7 pounds per hour when operating at a process weight rate of 77.4 tons of metal castings and sand molds and cores per hour.
- (c) The particulate (PM) from the magnesium treatment process shall not exceed 5.4 pounds per hour when operating at a process weight rate of 1.5 tons of metal castings per hour.

The pounds per hour limitation for (c) was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

The pounds per hour limitations for (a) and (b) were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

#### D.6.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

The following limits shall apply in order that the source maintain minor PSD status; therefore, the requirements of 326 IAC 2-2 (PSD) will not apply to units constructed after 1977.

- (a) The particulate matter (PM) from the old foundry pouring/casting system (emission unit 430) shall not exceed 4.20 pounds per ton of metal poured at the old foundry pouring system.
- (b) The PM10 from the old foundry pouring/casting system (emission unit 430) shall not exceed 2.06 pounds per ton of metal poured at the old foundry pouring system.
- (c) The lead emissions from the old foundry pouring/casting system (emission unit 440) shall not exceed 0.02 pounds per ton of metal poured at the old foundry pouring system.
- (d) The particulate matter (PM) from the old foundry castings cooling system (emission unit 440) shall not exceed 1.40 pounds per ton of metal poured at the old foundry pouring system.
- (e) The PM10 from the old foundry castings cooling (emission unit 440) shall not exceed 1.40 pounds per ton of metal poured at the old foundry pouring system.
- (e) The particulate matter (PM) from the magnesium treatment process shall not exceed 2.70 pounds per hour.
- (f) The PM10 from the magnesium treatment process shall not exceed 2.70 pounds per hour.
- (g) The lead emissions from the magnesium treatment process shall not exceed 0.0594

pounds per hour.

## SECTION D.7

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

Insignificant Activities including the following:

- (a) brazing, cutting, soldering, and welding; and
- (b) woodworking equipment used to make tooling patterns.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.7.1 Particulate (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the above listed processes shall not exceed the pounds per hour limitation as calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Fountain Foundry Corporation  
Source Address: 215 East VanBuren Street, Veedersburg, Indiana 47987  
Mailing Address: P.O. Box 188, Veedersburg, Indiana 47987  
Part 70 Permit No.: T045-6006-00001

**This certification shall be included when submitting monitoring, testing reports/results  
or other documents as required by this permit.**

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Affidavit (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: Fountain Foundry Corporation  
Source Address: 215 East VanBuren Street, Veedersburg, Indiana 47987  
Mailing Address: P.O. Box 188, Veedersburg, Indiana 47987  
Part 70 Permit No.: T045-6006-00001

**This form consists of 2 pages**

**Page 1 of 2**

- |   |  |
|---|--|
| 9 | This is an emergency as defined in 326 IAC 2-7-1(12)   |
| C | The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and                    |
| C | The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16. |

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

**Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Source Name: Fountain Foundry Corporation  
Source Address: 215 East VanBuren Street, Veedersburg, Indiana 47987  
Mailing Address: P.O. Box 188, Veedersburg, Indiana 47987  
Part 70 Permit No.: T045-6006-00001  
Facility: metal throughput to the cupola  
Parameter: tons of metal  
Limit: 13,600 tons of metal per 12 consecutive month period with compliance demonstrated at the end of each month

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Fountain Foundry Corporation  
Source Address: 215 East VanBuren Street, Veedersburg, Indiana 47987  
Mailing Address: P.O. Box 188, Veedersburg, Indiana 47987  
Part 70 Permit No.: T045-6006-00001

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD**

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

# **Indiana Department of Environmental Management Office of Air Quality**

## **Addendum to the Technical Support Document for a Part 70 Operating Permit**

<b>Source Name:</b>	<b>Fountain Foundry Corporation</b>
<b>Source Location:</b>	<b>215 East VanBuren Street, Veedersburg, Indiana 47987</b>
<b>County:</b>	<b>Fountain</b>
<b>SIC Code:</b>	<b>3321</b>
<b>Operation Permit No.:</b>	<b>T045-6006-00001</b>
<b>Permit Reviewer:</b>	<b>Nisha Sizemore</b>

On April 9, 2003, the Office of Air Quality (OAQ) had a notice published in the Fountain County Neighbor, Attica, Indiana, stating that Fountain Foundry Corporation had applied for a Part 70 Operating Permit to operate a gray and ductile iron foundry. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On May 19, 2003, George Craft of Fountain Foundry Corporation submitted comments on the proposed Part 70 permit. The summary of the comments is as follows:

### **Comment #1 Conditions D.4.1 and D.6.2 and the TSD**

The permit includes a number of emission limits and in some cases limits on annual production levels, which have been designed to ensure that the requirements of the PSD permitting rules do not apply. We believe that many of the assumed uncontrolled emission factors are much higher than actual emissions levels. However, we have agreed to accept these values in order to minimize the costs to our facility to maintain additional records or to do additional source testing. We would request that IDEM evaluate the accuracy of some of these factors as their use results in overly stringent emission limits for some of the other processes. Specifically we would request a review of the PM and PM10 emission factors for uncontrolled pouring and cooling emissions as well as for magnesium treatment in condition D.4.1 and D.6.2. Because of the uncertainty of many of the factors and the emission limits for some of the processes, Fountain Foundry may in the future petition for changes to the permit to adjust some of the limits provided the total allowable emissions remain below the PSD regulatory thresholds.

### **Response #1**

IDEM's procedure for allowing applicants to use emission factors other than those in AP-42, AIRS, FIRE, or other databases, which have been approved by EPA, includes a requirement to perform a stack test to verify that the alternate emission factor is indeed appropriate for the specific facility. Since Fountain Foundry does not wish to perform stack testing to verify alternate emission factors, IDEM must use the EPA-approved emission factors in AP-42 and FIRE.

### **Comment #2 Condition C.16, Compliance Response Plan.**

We do not believe that 40 CFR Part 70 or 326 IAC 2-7 provides any authority to require the preparation of a Compliance Response Plan (CRP) or to establish the basis for a violation of the permit for failure to conduct the identified response steps. Failure to take specific response steps should not be interpreted in any way as evidence of non-compliance with an underlying applicable requirement, which is implied

by this permit condition. We request that all references to a CRP be eliminated from this condition.

## **Response #2**

IDEM has worked with members of the Clean Air Act Advisory Council's Permit Committee, Indiana Manufacturing Association, Indiana Chamber of Commerce and individual applicants regarding the Preventive Maintenance Plan, the Compliance Monitoring Plan and the Compliance Response Plan. IDEM has clarified the preventive maintenance requirements by working with sources on draft language over the past two years. The plans are fully supported by rules promulgated by the Air Pollution Control Board. The plans are the mechanism each Permittee will use to verify continuous compliance with its permit and the applicable rules and will form the basis for each Permittee's Annual Compliance Certification. Each Permittee's ability to verify continuous compliance with its air pollution control requirements is a central goal of the Title V and FESOP permit programs.

The regulatory authority for and the essential elements of a compliance monitoring plan were clarified in IDEM's Compliance Monitoring Guidance, in May 1996. IDEM originally placed all the preventive maintenance requirements in the permit section titled "Preventive Maintenance Plan." Under that section the Permittee's Preventive Maintenance Plan(PMP) had to set out requirements for the inspection and maintenance of equipment both on a routine basis and in response to monitoring. Routine maintenance was a set schedule of inspections and maintenance of the equipment. The second was inspection and maintenance in response to monitoring that showed that the equipment was not operating in its normal range. This monitoring would indicate that maintenance was required to prevent the exceedance of an emission limit or other permit requirement. The maintenance plan was to set out the "corrective actions" that the Permittee would take in the event an inspection indicated an "out of specification situation", and also set out the time frame for taking the corrective action. In addition, the PMP had to included a schedule for devising additional corrective actions for out of compliance situations that the source had not predicted in the PMP. All these plans, actions and schedules were part of the Preventive Maintenance Plan, with the purpose of maintaining the Permittee's equipment so that an exceedance of an emission limit or violation of other permit requirements could be prevented.

After issuing the first draft Title V permits on public notice in July of 1997, IDEM received comments from members of the regulated community regarding many of the draft permit terms, including the PMP requirements. One suggestion was that the corrective action and related schedule requirements be removed from the PMP requirement and placed into some other requirement in the permit. This suggestion was based, in some part, on the desire that a Permittee's maintenance staff handle the routine maintenance of the equipment, and a Permittee's environmental compliance and engineering staff handle the compliance monitoring and steps taken in reaction to an indication that the facility required maintenance to prevent an environmental problem.

IDEM carefully considered this suggestion and agreed to separate the "corrective actions" and related schedule requirements from the PMP. These requirements were placed into a separate requirement, which IDEM named the Compliance Response Plan (CRP). In response to another comment, IDEM changed the name of the "corrective actions" to "response steps." That is how the present CRP requirements became separated from the PMP requirement, and acquired their distinctive nomenclature.

Other comments sought clarification on whether the failure to follow the PMP was a violation of the permit. The concern was that a Permittee's PMP might call for the Permittee to have, for example, three "widget" replacement parts in inventory. If one of the widgets was taken from inventory for use in maintenance, then the Permittee might be in violation of the PMP, since there were no longer three widgets in inventory, as required by the PMP. Comments also expressed a view that if a maintenance employee was unexpectedly delayed in making the inspection under the PMP's schedule, for example by the employee's sudden illness, another permit violation could occur, even though the equipment was



still functioning properly.

IDEM considered the comments and revised the PMP requirement so that if the Permittee fails to follow its PMP, a permit violation will occur only if the lack of proper maintenance causes or contributes to a violation of any limitation on emissions or potential to emit. This was also the second basis for separating the compliance maintenance response steps from the PMP and placing them in the Compliance Response Plan (CRP). Unlike the PMP, the Permittee must conduct the required monitoring and take any response steps as set out in the CRP (unless otherwise excused) or a permit violation will occur.

The Compliance Monitoring Plan is made up of the PMP, the CRP, the compliance monitoring and compliance determination requirements in section D of the permit, and the record keeping and reporting requirements in sections C and D. IDEM decided to list all these requirements under this new name, the Compliance Monitoring Plan (CMP), to distinguish them from the PMP requirements. The section D provisions set out which facilities must comply with the CMP requirement. The authority for the CMP provisions is found at 326 IAC 2-7-5(1), 2-7-5(3), 2-7-5(13), 2-7-6(1), 1-6-3 and 1-6-5.

Most Permittees already have a plan for conducting preventive maintenance for the emission units and control devices. It is simply a good business practice to have identified the specific personnel whose job duties include inspecting, maintaining and repairing the emission control devices. The emission unit equipment and the emission control equipment may be covered by a written recommendation from the manufacturer set out schedules for the regular inspection and maintenance of the equipment. The Permittee will usually have adopted an inspection and maintenance schedule that works for its particular equipment and process in order to keep equipment downtime to a minimum and achieve environmental compliance. The manufacturer may also have indicated, or the Permittee may know from experience, what replacement parts should be kept on hand. The Permittee may already keep sufficient spare parts on hand so that if a replacement is needed, it can be quickly installed, without a delay in the Permittee's business activities and without an environmental violation. For the most part, the PMP can be created by combining present business practices and equipment manufacturer guidance into one document, the Preventive Maintenance Plan (PMP).

The Permittee has 90 days to prepare, maintain and implement the PMP. IDEM is not going to draft the PMP. Permittees know their processes and equipment extremely well and are in the best position to draft the PMP. IDEM's air inspectors and permit staff will be available to assist the Permittee with any questions about the PMP. IDEM may request a copy of the PMP to review and approve.

The Preventive Maintenance Plan requirement must be included in every applicable Title V permit pursuant to 326 IAC 2-7-5(13) and for each FESOP permit pursuant to 326 IAC 2-8-4(9). Both of those rules refer back to the Preventive Maintenance Plan requirement as described in 326 IAC 1-6-3. This Preventive Maintenance Plan rule sets out the requirements for:

- (1) identification of the individuals responsible for inspecting, maintaining and repairing the emission control equipment (326 IAC 1-6-3(a)(1)),
- (2) the description of the items or conditions in the facility that will be inspected and the inspection schedule for said items or conditions (326 IAC 1-6-3(a)(2)), and
- (3) the identification and quantification of the replacement parts for the facility which the Permittee will maintain in inventory for quick replacement (326 IAC 1-6-3(a)(2)).

The CRP requirement of response steps and schedule requirements are another example of documenting procedures most Permittees already have developed in the course of good business

practices and the prevention of environmental problems. Equipment will often arrive with the manufacturer's trouble shooting guide. It will specify the steps to take when the equipment is not functioning correctly. The steps may involve some initial checking of the system to locate the exact cause, and other steps to place the system back into proper working order. Using the trouble shooting guide and the Permittee's own experience with the equipment, the steps are taken in order and as scheduled until the problem is fixed.

A Permittee will likely already have a procedure to follow when an unforeseen problem situation occurs. The procedure may list the staff to contact in order to select a course of action, or other step, before the equipment problem creates an environmental violation or interrupts the Permittee's business process.

The Compliance Monitoring Plan (CMP) is consistent with IDEM's Compliance Monitoring Guidance released in May of 1996. The guidance discusses corrective action plans setting out the steps to take when compliance monitoring shows an out of range reading (Guidance, page 13). Some of the terminology has changed, as a result of comments from regulated sources, but the requirements in the permit do not conflict with the guidance.

Condition C.16 (Compliance Monitoring Plan - Preparation, Implementation, Records, and Reports) (b)(4) has been revised to clarify that failure to take reasonable response steps shall be considered a deviation from the permit. Language was added to paragraph (e) to clarify that the records that need to be kept are those instances when, in accordance with Section D, response steps are taken.

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports  
[326 IAC 2-7-5] [326 IAC 2-7-6]

---

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
  - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
  - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this

condition.

- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall ~~constitute a violation of~~ **be considered a deviation from** the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, **in accordance with Section D**, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

**Comment #3 Conditions D.2.9, D.4.9 and D.5.8, Baghouse Inspections.**

These conditions require that baghouse inspections take place within the last month of each quarter. We do not believe it is appropriate, absent a clear-cut regulatory requirement, to require that the baghouse inspections take place at any particular time during the quarter. We need to have the flexibility to schedule inspection and maintenance work within the constraints of our labor force. We would request that these conditions be modified to remove the phrase "within the last month of".

**Response #3**

IDEM has changed the referenced conditions such that inspections are not required during the last month of each quarter. The condition now states that inspections required by this condition shall not be performed in consecutive months. Revised Condition D.2.9 is shown below as an example.

#### D.2.9 Baghouse Inspections

---

An inspection shall be performed ~~within the last month of~~ each calendar quarter of all bags controlling the cupola. **Inspections required by this condition shall not be performed in consecutive months.** All defective bags shall be replaced.

#### **Comment #4 Conditions D.2.10, D.4.10, D.5.9, Broken or Failed Bag Detection.**

The Emergency provisions of the permit provide a proper framework to address failed emission control equipment. This condition establishes a potential separate violation without even a reference to an underlying applicable requirement. The inclusion of a separate requirement to shutdown an emission unit without such an underlying regulatory basis is an illegal exercise of IDEM's authority. Conditions requiring shutdown of control equipment during malfunction conditions are specifically covered by section B.13, Emergency Provisions. Considering that the Emergency Provisions are applicable source wide for any type of control equipment, and have been included as a specific B section, we request that these conditions be removed from the permit. If these conditions are retained in the permit we would request that the specific indicators of potential baghouse failure be removed from the language of this condition. While the conditions listed may indicate that a problem exists or may have existed in the past, they are not confirming indicators that the baghouse has failed or that the emission limitations have been exceeded. Including this list in the condition will suggest that these conditions in fact indicate a failed baghouse, which they do not. We request the deletion of the following words from each of these conditions, "if failure is indicated by a significant drop in the bag house pressure readings with abnormal visual emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then".

#### **Response #4**

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit. Since not every broken or failed bag is the result of an emergency, Condition B.12 (Emergency Provisions) does not specify the responses to be implemented in all situations where the Permittee might observe a broken or failed bag. Paragraph (a) of the condition already refers the Permittee to Condition B.12 (Emergency Provisions) for situations where the broken or failed bag is the result of an emergency. These conditions have not been removed from the permit.

As requested, IDEM has deleted the language listing specific indicators of baghouse failure. Revised Condition D.2.10 is shown below as an example. Similar changes have been made to Conditions D.4.10 and D.5.9.

#### D.2.10 Broken or Failed Bag Detection

---

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be

initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

- (b) For single compartment baghouses, ~~if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then~~ failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### **Comment #5 Conditions D.4.3 VOC Emissions.**

This condition sets limits on the VOC emission rate from pouring, cooling and shakeout operations such that the total annual emissions do not exceed the 25 tons/year BACT threshold. We would request that these limits be combined as a single limit for all three processes. The combined limit would be 5.68 pounds per hour. We would also request that the last sentence in this condition remove the reference to the limitations on the Cupola in Condition D.2.2. We do not believe that these conditions are in fact related to one another.

#### **Response #5**

IDEM agrees to make the requested changes to Condition D.4.3. The changes to Condition D.4.3 are shown below:

##### **D.4.3 VOC Emissions [326 IAC 8-1-6]**

~~In order to render the requirements of 326 IAC 8-1-6 (BACT) not applicable to the South pallet line pouring and cooling process, the south turntable pouring and cooling process, and the Dideon rotary drum shakeout process, the following conditions shall apply:~~

- ~~\_\_\_\_\_ (a) \_\_\_\_\_ The VOC emissions from the South pallet line pouring and cooling process, shall not exceed 1.01 pounds per hour.~~
- ~~\_\_\_\_\_ (b) \_\_\_\_\_ The VOC emissions from the south turntable pouring and cooling process, and shall not exceed 1.01 pounds per hour.~~
- ~~\_\_\_\_\_ (c) \_\_\_\_\_ The VOC emissions from the Dideon rotary drum shakeout process shall not exceed 3.66~~  
**a combined total of 5.68 pounds per hour.**

~~Compliance with these limits this limit in combination with the cupola production limit in Condition D.2.2 will render the requirements of 326 IAC 8-1-6 (BACT) not applicable to these facilities.~~

#### **Comment #6 Technical Support Document - Un-permitted Sources and Enforcement Issue.**

We do not agree with the characterization found at pages 2 and 4 of the TSD indicating that all of these processes were not permitted. While processes such as the charge system were not explicitly identified in permits issued historically by IDEM, we believe that this is a function of the level of detail for process

descriptions that IDEM chose to use at that time and not a failure on our part to obtain permits. These processes, now referred to as "unpermitted", were implicitly included as a part of the processes listed in the permits and should be relisted as "permitted".

#### Response #6

IDEM has reviewed the previous permits and the permit applications submitted to obtain those permits. None of these documents list any of the processes identified as unpermitted in the TSD. Additionally, the permit support documents found in IDEM's files indicate that the emissions from these facilities were not considered in the review and evaluation that resulted in the permits issued to Fountain Foundry. Based on this information, IDEM has concluded that these facilities were not properly permitted. As a result, these facilities were listed in the unpermitted section of the TSD.

#### Comment #7 Technical Support Document - HAPs calculations.

The TSD includes extensive calculations of HAP emissions from various processes, and we do not believe that the emission factors used in these calculations are accurate or sufficiently documented. As such we would reserve the right to provide alternate calculations of HAP emissions in any future matters where these calculations may be relevant to a regulatory determination.

#### Response #7

The emission factors are based on information from Speciate. The Permittee is welcome to provide alternate emission factors for IDEM's consideration if there is some reason to believe the ones that IDEM has used are inappropriate. Until such information is submitted by the Permittee for IDEM's review, IDEM will continue to use the emission factors in the TSD.

Upon further review, IDEM has decided to make the following changes to the permit.

#### Table of Contents

##### Revision #1

The following updates have been made to the table of contents in order to be complete, clear, and correct.

- A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][**326 IAC 2-7-1(22)**]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
**[326 IAC 2-7-5(15)]**
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]  
**[326 IAC 2-7-5(15)]**
- B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)]  
**[326 IAC 1-6-3]**
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination  
**[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]**
- B.19 Permit Revision Under Economic Incentives and Other Programs **[326 IAC 2-7-5(8)]**  
**[326 IAC 2-7-12 (b)(2)]**
- B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
- C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates **Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]**

- C.12 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]
- C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)]  
[326 IAC 2-7-6(1)]
- C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5]  
[326 IAC 2-7-6]
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]
- C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]  
[326 IAC 2-6]

## Section B

### Revision #1

The duty to supplement an application is not an ongoing requirement after the permit is issued; therefore, (a) has been removed from Condition B.7 (Duty to Supplement and Provide Information).

- B.7 ~~Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]~~  
~~[326 IAC 2-7-6(6)]~~

~~(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:~~

~~\_\_\_\_\_ Indiana Department of Environmental Management  
\_\_\_\_\_ Permits Branch, Office of Air Quality  
\_\_\_\_\_ 100 North Senate Avenue, P. O. Box 6015  
\_\_\_\_\_ Indianapolis, Indiana 46206-6015~~

~~\_\_\_\_\_ The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

(b)(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(c) (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

### Revision #2

For clarification purposes, Condition B.8 has been changed as shown below:

- B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

(a) **As provided in 326 IAC 2-7-5(6),** the Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:

### Revision #3

B.11 (b) was revised to clarify that required record keeping needs to be implemented as well as the rest of the plan to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit. Also, (c) has been revised to clarify that OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The requirements to keep records of preventive maintenance in (d) has been moved to Section D. Because the general record keeping requirements (i.e. retained for 5 years) are in Section C, it is not necessary to include them in this condition or in the D condition. At some sources, an OMM Plan is required. Instead of having two separate plans, the OMM Plan may satisfy the PMP requirements, so (d) has been added to this condition.

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]  
[326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs, **including any required record keeping**, as necessary to ensure that failure to implement a PMP does not cause or contribute to a ~~violation~~ **an exceedance** of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or ~~contributes to any violation~~ **is the primary contributor to an exceedance of any limitation on emissions or potential to emit**. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).



- ~~(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.~~
- (d) **To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.**

#### Revision #4

In order to clarify that an amendment or modification will not be required for the addition, operation or removal of a nonroad engine, paragraph (d) has been added to Condition B.18 (Permit Amendment or Modification).

**B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]**

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015
- Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) **No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.**

#### Revision #5

For clarity, additional rule cites have been added to B.22 (Inspection and Entry).

**B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC 13-30-3-1] [IC 13-17-3-2]**

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) **As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have** ~~Have~~ access to and copy any records that must be kept under the conditions of this permit;
- (c) **As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect** ~~inspect~~ any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) **As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample** ~~Sample~~ or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) **As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize** ~~Utilize~~ any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

## Section C

### Revision #1

The following change has been made to C.1 Particulate Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) Pounds Per Hour:

- C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]
- (a) Pursuant to 40 CFR 52 Subpart P, ~~the allowable~~ particulate matter emissions ~~rate~~ from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
  - (b) Pursuant to 326 IAC 6-3-2(e)(2), ~~the allowable~~ particulate emissions ~~rate~~ from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This condition is not federally enforceable.

### Revision #2

Condition C.8 (Asbestos Abatement Projects) has been revised to clarify that the requirement to have an Indiana Accredited Asbestos inspector is not federally enforceable. Also, a paragraph has been added to address demolition and renovation.

- C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]
- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**  
**The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).**
- ~~(f)~~(g) Indiana Accredited Asbestos Inspector  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. ~~The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61,~~

~~Subpart M, is federally enforceable.~~ **The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.**

### Revision #3

Condition C.15 (Risk Management Plan) has been revised so that it is more straightforward, and the condition requires the source to comply with the applicable requirements of 40 CFR 68 if a regulated substance is present at a source in more than a threshold quantity.

C.15 ~~Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68-215]~~

If a regulated substance, ~~subject to as defined in 40 CFR 68,~~ is present at a source in more than a threshold quantity, ~~40 CFR 68 is an applicable requirement and the Permittee shall submit:~~ **the source must comply with the applicable requirements of 40 CFR 68.**

~~(a) A compliance schedule for meeting the requirements of 40 CFR 68; or~~

~~(b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).~~

~~All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

### Revision #4

In order to clarify which documents need to be certified by the responsible official, the following update has been made:

C.17 ~~Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]~~

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The **response action** documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### Revision #5

Condition C.18 (a) (Emission Statement) has been updated to include the specific rule cite that defines the regulated pollutants being referred to in this condition.

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate estimated actual emissions of ~~other~~ regulated pollutants (as defined by 326 IAC ~~2-7-1(32)~~) (**"Regulated pollutant which is used only for purposes of Section 19 of this rule"**) from the source, for purposes of Part 70 fee assessment.

**Revision #6**

It is acceptable for records to be electronically accessible instead of being physically present at a source; therefore, the following update has been made to Condition C.19 (General Record Keeping Requirements):

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required **monitoring** data, reports and support information **required by this permit** shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be ~~kept~~ **physically present or electronically accessible** at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

## **Indiana Department of Environmental Management Office of Air Quality**

### **Technical Support Document (TSD) for a Part 70 Operating Permit**

#### **Source Background and Description**

<b>Source Name:</b>	<b>Fountain Foundry Corporation</b>
<b>Source Location:</b>	<b>215 East VanBuren Street, Veedersburg, Indiana 47987</b>
<b>County:</b>	<b>Fountain</b>
<b>SIC Code:</b>	<b>3321</b>
<b>Operation Permit No.:</b>	<b>T045-6006-00001</b>
<b>Permit Reviewer:</b>	<b>Nisha Sizemore</b>

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from Fountain Foundry Corporation relating to the operation of a gray and ductile iron foundry.

This Part 70 permit contains provisions intended to satisfy the requirements of the construction permit rules.

#### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (1) one (1) cupola melt furnace, referred to as emission unit 110, constructed in 1973, with a maximum melt rate of 9.0 tons of iron per hour, with emissions controlled by baghouse #4 and two natural gas-fired afterburners, with emissions exhausting to stack SC-4;
- (2) one (1) electric induction furnace system, referred to as emission unit 140, constructed in 1994 and modified with a second furnace shell added in 1998, with a maximum melting capacity of 1.5 tons of iron per hour, with emissions uncontrolled;
- (3) one (1) pouring line, referred to as the South pouring/casting turntable and emission unit 410, constructed in 1989, with a maximum capacity of 4 tons of iron per hour and 30.4 tons of sand molds and cores per hour, with emissions controlled by baghouse #1 and exhausting to stack SC-1;
- (4) one (1) castings cooling line, referred to as the South castings cooling turntable and emission unit 420, constructed in 1989, with a maximum capacity of 4 tons of iron per hour and 30.4 tons of sand molds and cores per hour, with emissions controlled by baghouse #1 and exhausting to stack SC-1;

- (5) one (1) casting shakeout line, referred to as the Dideon rotary drum shakeout and emission unit 450, constructed in 1989, with a maximum capacity of 9 tons of iron per hour and 68.4 tons of sand molds and cores per hour, with emissions controlled by baghouse #1 and exhausting to stack SC-1;
- (6) one (1) sand handling system, referred to as the South sand system and emission unit 310, constructed in 1989, with a maximum capacity of 28.8 tons of sand per hour, with emissions controlled by baghouse #1 and exhausting to stack SC-1;
- (7) one (1) pouring line, referred to as the South pouring/casting pallet line and emission unit 415, constructed in 1989, with a maximum capacity of 3.2 tons of iron per hour and 24.32 tons of sand molds and cores per hour, with emissions uncontrolled and exhausting internally;
- (8) one (1) castings cooling line, referred to as the South pallet cooling line and emission unit 425, constructed in 1989, with a maximum capacity of 3.2 tons of iron per hour and 24.32 tons of sand molds and cores per hour, with emissions uncontrolled and exhausting internally;
- (9) one (1) 14 cubic foot Wheelabrator shot blast machine, referred to as emission unit 510, constructed in 1971, with a maximum capacity of 2 tons of iron castings per hour, with emissions controlled by baghouse #2 and exhausting to stack SC-2;
- (10) one (1) 34 cubic foot Wheelabrator shot blast machine, referred to as emission unit 520, constructed in 1975, with a maximum capacity of 5.6 tons of iron castings per hour, with emissions controlled by baghouse #2 and exhausting to stack SC-2;
- (11) one (1) sand handling system, referred to as the Old Foundry sand system and emission unit 330, constructed in 1960, with a maximum capacity of 5.8 tons of sand per hour, with emissions controlled by baghouse #2 and exhausting to stack SC-2.

### **Unpermitted Emission Units and Pollution Control Equipment**

The source also consists of the following unpermitted facilities/units:

- (1) one (1) cupola charge handling operation, referred to as emission unit 120, constructed in 1960, with a maximum capacity of 9.0 tons per hour of metal, with emissions uncontrolled;
- (2) one (1) electric induction furnace charge handling operation, referred to as emission unit 145, constructed in 1994, with a maximum capacity of 1.5 tons per hour of metal, with emissions uncontrolled
- (3) one (1) pouring system, referred to as the Old Foundry pouring/casting system and emission unit 430, constructed in 1960 and partially relocated in 1998, with a maximum capacity of 9 tons of iron per hour and 68.4 tons of sand molds and cores per hour, with emissions uncontrolled and exhausting internally;
- (4) one (1) castings cooling system, referred to as the Old Foundry cooling system and emission unit 440, constructed in 1960 and partially relocated in 1998, with a maximum capacity of 9 tons of iron per hour and 68.4 tons of sand molds and cores per hour, with emissions uncontrolled and exhausting internally;
- (5) one (1) casting shakeout line, referred to as the shaker table system and emission unit 460, constructed in 1975, with a maximum capacity of 5 tons of iron per hour and 38 tons

of sand molds and cores per hour, with emissions controlled by baghouse #2 and exhausting to stack SC-2;

- (6) one (1) magnesium treatment process, constructed in 1960, with a maximum capacity of 1.5 tons of iron per hour, with emissions uncontrolled;
- (7) the core making process including the following emission units:
  - (a) one (1) Pepset core machine, constructed in 1989, with a maximum capacity of 0.7 tons of cores per hour and 24 pounds of pepset resin per ton of sand, with emissions uncontrolled;
  - (b) three (3) shellcore machines, constructed prior to 1970, each with a maximum capacity of 0.5 tons of cores per hour and 56 pounds of shell sand VTCA resin per ton of core sand when making shell sand cores, and each with a maximum capacity of 0.4 tons of cores per hour and 30 pounds of shell sand FTLH resin per ton of core sand when making warm box cores, with emissions uncontrolled;
  - (c) one (1) shellcore machine, constructed prior to 1970, with a maximum capacity of 0.1 ton of cores per hour and 56 pounds of shell sand VTCA resin per ton of core sand when making shell sand cores, with emissions uncontrolled;
  - (d) six (6) shellcore machines, constructed between 1977 and 1980, each with a maximum capacity of 0.5 tons of cores per hour and 56 pounds of shell sand VTCA resin per ton of core sand when making shell sand cores, and each with a maximum capacity of 0.4 tons of cores per hour and 30 pounds of shell sand FTLH resin per ton of core sand when making warm box cores, with emissions uncontrolled;
  - (e) one (1) CO<sub>2</sub> mix core machine, constructed in 1969, with a maximum capacity of 0.1 tons of cores per hour and 80 pounds of CO<sub>2</sub> mix resin per ton of core sand, with emissions uncontrolled;
  - (f) one (1) oilcore core making process, constructed in 1960, with a maximum capacity of 0.4 tons of cores per hour and 20 pounds of Lin oil resin per ton of core sand, with emissions uncontrolled;
  - (g) two (2) warm box core machines, each with a maximum capacity of 540 pounds of cores per hour and 30 pounds of resin per ton of core sand, with emissions uncontrolled; and
  - (h) core wash activities referred to as emission unit 290, constructed in 1960, with a maximum usage rate of 37.44 pounds of VOC per hour, with emissions uncontrolled.

### **New Emission Units and Pollution Control Equipment**

There are no new facilities to be reviewed under this review process.

### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) Space heaters, process heaters, heat treat furnaces, or boilers using the following fuels:



- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
- (b) propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour;
- (2) combustion source flame safety purging on startup;
- (3) a gasoline fuel transfer and dispensing operation;
- (4) a petroleum fuel, other than gasoline, dispensing facility;
- (5) vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (6) cleaner and solvents;
- (7) brazing, cutting, soldering, and welding;
- (8) replacement or repair of electrostatic precipitators, bags in baghouses and filters in other filtration equipment;
- (9) paved and unpaved roads and parking lots with public access;
- (10) grinding and machining operations including four (4) grinders, referred to as emission unit 550, constructed in 1966, with a maximum capacity of 7.6 tons of iron castings per hour, with emissions controlled by baghouse #2 and exhausting to stack SC-2;
- (11) mold release agents using low volatile products;
- (12) woodworking equipment used to make tooling patterns;
- (13) fugitive emissions from storage piles; and
- (14) fugitive emissions from unpaved roads.

### Existing Approvals

The source has constructed or has been operating under the following previous approvals:

- (1) operation permit 25-06-87-0071, issued September 27, 1983;
- (2) registration issued June 1, 1989; and
- (3) exemption CP045-3579, issued on March 22, 1994.

All terms and conditions from previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

### Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

### Special Issue

This source melts scrap iron using a cupola and an electric induction furnace, then pours the molten metal into sand molds to make gray and ductile iron castings. Since this source melts scrap metal, it is considered a secondary metal production facility, which is one of the 28 listed source categories pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)). The issue in this case is whether the entire source is considered a secondary metal production facility,

which is one of the 28 listed source categories pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), or if only the melting process should be considered secondary metal production, with all operations after the melting process being considered “die cast” facilities, which would not be one of the 28 listed source categories, or if the entire facility should not be classified as a secondary metal production facility.

The applicant states that the SIC code manual does not have any classification for “secondary smelting and refining ferrous metals”. Process which refine iron or steel are not referred to as “secondary metal processes” either in the SIC codes or in practice in the iron and steel industry. In fact, the distinction between primary and secondary production facilities is limited to non-ferrous metals. If EPA’s logic in the Aluminum die caster memo is used, one would have to conclude that iron and steel foundries are not secondary metal production facilities, since the term “secondary” is limited to solely to non-ferrous industries.

The history associated with the PSD program would also support this distinction between ferrous and non-ferrous industries. The 28 listed source categories which have a 100 ton/year major source threshold were source categories which had NSPS standards in place at the time the 1977 amendments to the Clean Air Act were promulgated. NSPS standards were in place for secondary brass and bronze facilities, and secondary lead facilities (all non-ferrous metals). There were no standards in place for iron and steel foundries. Therefore, it is reasonable to conclude that Congress intended to include sources, which were subject to NSPS standards when the list of categories was developed.

There are also technical reasons why grey iron production differs from secondary nonferrous production. We point out that the nature of the raw materials used in a cupola melt process is fundamentally different from secondary aluminum production. Grey iron production uses steel scrap materials and a wide range of other raw materials including pig iron, coke, limestone, and other additives. The grey iron melting process may recover metal from the scrap, but its primary purpose is to produce a material with the proper metallurgic properties for the casting.

The applicant further argues that if the melting process is to be considered a secondary metal production facility, then the operations after the melt process should be considered die-cast facilities. The applicant states that because the metal is already purified after the melt process, all operations after the melt process should not be considered secondary metal production facilities. The applicant proposes that the source receive a “nested permit” where only the melting operations are considered secondary metal production, and all operations after the melting process would not be considered secondary metal production facilities. In such a case the melting process would be subject to a 99 tpy limit, and all operations after the melting process would be subject to a 150 tpy limit, making the entire source a minor source pursuant to 326 IAC 2-2 (PSD).

IDEM, OAQ and EPA Region V have rejected the applicant’s proposal to consider the entire source as a facility other than a secondary metal facility. Region V has stated that if a facility melts any post-consumer scrap, then that facility is considered a secondary metal production facility. Fountain Foundry’s feedstock consists of 100% scrap iron; therefore, the foundry is considered a secondary metal production facility.

IDEM, OAQ and EPA Region V have rejected the applicant’s proposal to consider only the melting processes secondary metal production facilities. IDEM, OAQ and EPA Region V believe that the purpose of “nesting” is not so that a foundry can separate different facilities in the same production line, designating some as secondary metal production facilities and others as die-cast facilities. Since the entire production line is necessary to make a finished product, the entire production line must be considered either a secondary metal production line or a die cast line. EPA Region V suggests that the concept of a nested permit could be used in a case where a foundry utilizes one particular furnace and production line to melt and cast all of its scrap metal, while all of the other furnaces and production lines would melt and cast only pure metal (no

scrap). In such a case, the furnace and production line melting and casting the scrap metal would be considered secondary metal production facilities, while the furnaces and production lines melting and casting the pure metal would not be considered secondary metal production facilities. Such a source could obtain a "nested" source permit where the furnace and production line melting and casting the scrap would be subject to the 99 tpy limit, while the furnaces and production lines melting and casting the pure metal would be subject to a 150 tpy limit, which would make the entire source a PSD minor source.

Fountain Foundry does not segregate its feedstock such that one furnace melts all the scrap while another furnace melts pure metal. Since scrap metal is melted in all furnaces, the OAQ and EPA Region V believe that the entire source should be considered a secondary metal production facility.

In response to this, the applicant has requested that all of the facilities constructed prior to 1977 be given a 99 tpy limit so that when PSD went into effect in 1977, the source would have been considered a PSD minor source. Then when additional facilities were constructed in 1989, these new facilities would also be given a 99 tpy limit. The OAQ has complied with this request.

### Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively incomplete Part 70 permit application for the purposes of this review was received on June 3, 1996. Additional information received on August 16, 1996 and September 16, 1996 makes the Part 70 permit application administratively complete.

A notice of completeness letter was mailed to the source on December 17, 1996.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations.

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	greater than 100

PM-10	greater than 100
SO <sub>2</sub>	less than 100
VOC	greater than 100
CO	greater than 100
NO <sub>x</sub>	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
chromium	less than 10
cobalt	less than 10
nickel	less than 10
arsenic	less than 10
cadmium	less than 10
selenium	less than 10
lead	less than 10
phenol	less than 10
benzene	less than 10
formaldehyde	less than 10
xylene	less than 10
toluene	less than 10
TOTAL	less than 25

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16) of PM10, VOC, and CO are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions  
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

### Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2000 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	21
PM-10	21
SO <sub>2</sub>	6
VOC	7
CO	18
NO <sub>x</sub>	1

## County Attainment Status

The source is located in Fountain County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Fountain County has been designated as attainment or unclassifiable for ozone.
- (b) Fountain County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

## Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

## Federal Rule Applicability

- (a) There are no New Source Performance Standards (326 IAC 12) 40 CFR Part 60 applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) 40 CFR Parts 61 or 63 applicable to this source.
- (c) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this source because the source is not a major source of hazardous air pollutants (HAPs) emissions (i.e. the source does not have the potential to emit 10 tons per year or greater of a single HAP or 25 tons per year or more of a combination of HAPs).

## State Rule Applicability - Entire Source

### 326 IAC 1-5-2 (Emergency Reduction Plans)

The source submitted an Emergency Reduction Plan (ERP) on September 13, 1999. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This existing source is a major stationary source because it is one of the 28 listed source categories (secondary metal production) and at least one attainment regulated pollutant is emitted at a rate of 100 tons per year. This source has never been reviewed pursuant to the requirements of 326 IAC 2-2 (PSD) due to the dates of construction of most of the emission units.

The applicant has requested that all of the facilities constructed prior to 1977 be given limits of 99 tons per year so that when PSD went into effect in 1977, the source would have been considered a PSD minor source. Then when additional facilities were constructed in 1989, these newer facilities would also be given limits of 99 tons per year. The facilities constructed in 1994 have emission limits less than the PSD significance thresholds. Appendix A of the TSD explains how the limits necessary to render PSD not applicable to all the facilities at this plant were derived.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

In order to render the requirements of PSD not applicable, the following limits shall apply:

- (a) The particulate matter (PM) from the baghouse #2 controlling the 14 cubic foot Wheelabrator shot blast machine (emission unit 510), the 34 cubic foot Wheelabrator shot blast machine (emission unit 520), the castings shaker table (emission unit 460), the grinders, and the old foundry sand handling system (emission unit 330) shall not exceed 1.55 pounds per hour.
- (b) The PM<sub>10</sub> from the baghouse #2 controlling the 14 cubic foot Wheelabrator shot blast machine (emission unit 510), the 34 cubic foot Wheelabrator shot blast machine (emission unit 520), the castings shaker table (emission unit 460), the grinders, and the old foundry sand handling system (emission unit 330) shall not exceed 8.49 pounds per hour.
- (c) The lead emissions from the baghouse #2 controlling the 14 cubic foot Wheelabrator shot blast machine (emission unit 510), the 34 cubic foot Wheelabrator shot blast machine (emission unit 520), the castings shaker table (emission unit 460), the grinders, and the old foundry sand handling system (emission unit 330) shall not exceed 0.0047 pounds per hour.
- (d) The PM emissions from the cupola scrap and charge handling (emission unit 120) shall not exceed 0.60 pounds per ton of metal melted in the cupola.
- (e) The PM<sub>10</sub> emissions from the cupola scrap and charge handling (emission unit 120) shall not exceed 0.36 pounds per ton of metal melted in the cupola.
- (f) The lead emissions from the cupola scrap and charge handling (emission unit 120) shall not exceed 0.0029 pounds per ton of metal melted in the cupola.
- (g) The particulate matter (PM) from the baghouse controlling the cupola melt furnace (emission unit 110) shall not exceed 0.207 pounds per ton of metal melted in the cupola.
- (h) The particulate matter less than 10 microns (PM<sub>10</sub>) from the baghouse controlling the cupola melt furnace (emission unit 110) shall not exceed 0.185 pounds per ton of metal melted in the cupola.
- (i) The carbon monoxide (CO) emissions from the cupola melt furnace (emission unit 110) shall not exceed 14.56 pounds per ton of metal melted in the cupola.
- (j) The SO<sub>2</sub> emissions from the cupola melt furnace (emission unit 110) shall not exceed 14.52 pounds per ton of metal melted in the cupola.

- (k) The VOC emissions from the cupola shall not exceed 0.18 pounds per ton of metal melted in the cupola.
- (l) The lead emissions from the baghouse controlling the cupola melt furnace (emission unit 110) shall not exceed 0.004 pounds per ton of metal melted in the cupola.
- (m) The amount of metal throughput to the cupola shall not exceed 13,600 tons of iron per twelve (12) consecutive month period.
- (n) The particulate matter (PM) from the old foundry pouring/casting system (emission unit 430) shall not exceed 4.20 pounds per ton of metal poured at the old foundry pouring system.
- (o) The PM10 from the old foundry pouring/casting system (emission unit 430) shall not exceed 2.06 pounds per ton of metal poured at the old foundry pouring system.
- (p) The lead emissions from the old foundry pouring/casting system (emission unit 430) shall not exceed 0.02 pounds per ton of metal poured at the old foundry pouring system.
- (q) The particulate matter (PM) from the old foundry castings cooling system (emission unit 440) shall not exceed 1.40 pounds per ton of metal poured at the old foundry pouring system.
- (r) The PM10 from the old foundry castings cooling (emission unit 440) shall not exceed 1.40 pounds per ton of metal poured at the old foundry pouring system.
- (s) The particulate matter (PM) from the magnesium treatment process shall not exceed 2.70 pounds per hour.
- (t) The PM10 from the magnesium treatment process shall not exceed 2.70 pounds per hour.
- (u) The PM emissions from the baghouse #1 controlling the South pouring/casting turntable (emission unit 410), the South castings cooling turntable (emission unit 420), the Dideon rotary drum shakeout (emission unit 450), and the sand handling system (emission unit 310) shall not exceed 5.51 pounds per hour.
- (v) The PM10 emissions from the baghouse #1 controlling the South pouring/casting turntable (emission unit 410), the South castings cooling turntable (emission unit 420), the Dideon rotary drum shakeout (emission unit 450), and the sand handling system (emission unit 310) shall not exceed 12.04 pounds per hour.
- (w) The lead emissions from the baghouse #1 controlling the South pouring/casting turntable (emission unit 410), the South castings cooling turntable (emission unit 420), the Dideon rotary drum shakeout (emission unit 450), and the sand handling system (emission unit 310) shall not exceed 0.074 pounds per hour.
- (x) The PM emissions from the south pallet line pouring/casting shall not exceed 4.20 pounds per ton of castings.
- (y) The PM10 emissions from the south pallet line pouring/casting shall not exceed 2.06 pounds per ton of castings.
- (z) The PM emissions from the south pallet line cooling shall not exceed 1.40 pounds per

ton of castings

- (aa) The PM10 emissions from the south pallet line cooling shall not exceed 1.40 pounds per ton of castings.
- (bb) The lead emissions from the south pallet line pouring/casting shall not exceed 0.02 pound per ton of castings.
- (cc) The combined PM emissions from the electric induction furnace charge handling process (emission unit 145) and the electric induction furnace (emission unit 140) shall not exceed 5.68 pounds per hour.
- (dd) The combined PM10 emissions from the electric induction furnace charge handling process (emission unit 145) and the electric induction furnace (emission unit 140) shall not exceed 3.40 pounds per hour.
- (ee) The combined lead emissions from the electric induction furnace charge handling process (emission unit 145) and the electric induction furnace (emission unit 140) shall not exceed 0.135 pounds per hour.

**326 IAC 2-6 (Emission Reporting)**

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM, PM10, and CO. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

**326 IAC 5-1 (Opacity Limitations)**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**State Rule Applicability - Individual Facilities**

**326 IAC 7-1.1 ( Sulfur Dioxide Emission Limitations)**

The cupola (emission unit 110) is subject to this rule because the cupola has the potential to emit greater than 25 tons per year or 10 pounds per hour of SO<sub>2</sub>. However, there are no established limits for the combustion of coke. The OAQ does not believe that the limit for coal applies because coke is a chemically different substance than coal.

**326 IAC 9-1-2 (CO Emissions)**

The cupola is not subject to this rule because it has a capacity less than 10 tons per hour.

**326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)**

All of the processes that emit particulate matter are subject to the requirements of this rule. Pursuant to this rule the particulate (PM) emissions from the facilities shall be limited by the



following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and  
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour and  
P = process weight rate in tons per hour

Process/facility	Control Device ID	Maximum Process Weight Rate (tons/hr)	Allowable PM Emissions (lbs/hr)	Allowable PM Emissions (tons per year)
cupola scrap and charge handling (120)	none	9	17.9	78.4
cupola melt furnace (110)	baghouse #4	9	17.9	78.4
charge handling for electric induction furnace (145)	none	1.5	5.4	23.7
electric induction furnace (140)	none	1.5	5.4	23.7
south pallet line pouring (415)	none	27.52	37.8	165
south pallet line cooling (425)	none	27.52	37.8	165
south pouring turntable (410)	baghouse #1	34.4	41.2	180
south castings cooling turntable (420)	baghouse #1	34.4	41.2	180
Dideon rotary drum shakeout (450)	baghouse #1	77.4	48.7	213
shaker table system (460)	baghouse #2	43	43.2	189
south sand handling system (310)	baghouse #1	28.8	39.0	171
14 cubic foot Wheelabrator shot blast machine (510)	baghouse #2	2	6.5	28.5
34 cubic foot Wheelabrator shotblast machine (520)	baghouse #2	5.6	13.0	56.9
old foundry sand handling system (330)	baghouse #2	5.8	13.3	58.3
old foundry castings pouring (430)	none	77.4	48.7	213

Process/facility	Control Device ID	Maximum Process Weight Rate (tons/hr)	Allowable PM Emissions (lbs/hr)	Allowable PM Emissions (tons per year)
old foundry castings cooling (440)	none	77.4	48.7	213
magnesium treatment process	none	1.5	5.4	23.7

The baghouses shall be in operation at all times the corresponding facilities are in operation, in order to comply with this limit. Based on calculations, the processes are in compliance with these requirements.

For insignificant particulate-emitting facilities not listed in the table above, the allowable PM emission rate from each process shall not exceed allowable PM emission rate based on the appropriate equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour;  
and

P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour;  
and

P = process weight rate in tons per hour

### 326 IAC 8-1-6 (Best Available Control Technology (BACT))

This rule applies to facilities constructed after January 1, 1980 which have the potential to emit VOC of 25 tons per year or more. The following table shows the 326 IAC 8-1-6 applicability determinations for each facility.

Process/facility	Date of Construction	Potential Uncontrolled VOC emissions	Limited VOC Emissions	Production Limit	326 IAC 8-1-6 Applicability Determination
cupola scrap and charge handling (120)	1960	N/A	N/A	N/A	not applicable; pre-dates rule
cupola melt furnace (110)	1973	N/A	N/A	N/A	not applicable; pre-dates rule
charge handling for electric induction furnace (145)	1994	0	N/A	N/A	not applicable, VOC less than 25 tons/yr

Process/facility	Date of Construction	Potential Uncontrolled VOC emissions	Limited VOC Emissions	Production Limit	326 IAC 8-1-6 Applicability Determination
electric induction furnace (140)	1994	0	N/A	N/A	not applicable, VOC less than 25 tons/yr
south pallet line pouring, and cooling (415 and 425)	1989	1.96	N/A	N/A	not applicable, VOC less than 25 tons/yr
south turntable pouring and cooling (410 and 420); Dideon rotary drum shakeout (450)	1989	49.75	Less than 25 tons/yr total; 1.01 lb/hr for pouring and cooling and 3.66 lb/hr for shakeout	none on these units specifically, but 13,600 tons metal/yr limit on cupola	not applicable; production limit on cupola and short term emission limitation render rule not applicable
shaker table system (460)	1975	N/A	N/A	N/A	not applicable; pre-dates rule
south sand handling system (310)	1989	0	N/A	N/A	not applicable, VOC less than 25 tons/yr
14 cubic foot Wheelabrator shot blast machine (510)	1971	N/A	N/A	N/A	not applicable; pre-dates rule
34 cubic foot Wheelabrator shotblast machine (520)	1975	N/A	N/A	N/A	not applicable; pre-dates rule
old foundry sand handling system (330)	1960	N/A	N/A	N/A	not applicable; pre-dates rule
pepset core machine	1989	less than 25 tons per year	N/A	N/A	not applicable, VOC less than 25 tons/yr
four (4) shellcore machines	prior to 1970	N/A	N/A	N/A	not applicable; pre-dates rule
six (6) shell core machines	prior to 1980	N/A	N/A	N/A	not applicable; pre-dates rule
CO <sub>2</sub> mix core machine	1969	N/A	N/A	N/A	not applicable; pre-dates rule
oilcore core making process	1960	N/A	N/A	N/A	not applicable; pre-dates rule
core wash activities	1960	N/A	N/A	N/A	not applicable; pre-dates rule

In order to render the requirements of 326 IAC 8-1-6 (BACT) not applicable to the South pallet line pouring and cooling process, the south turntable pouring and cooling process, and the Dideon rotary drum shakeout process, the following conditions shall apply:

- (a) The VOC emissions from the South pallet line pouring and cooling process shall not exceed 1.01 pounds per hour.
- (b) The VOC emissions from the south turntable pouring and cooling process shall not exceed 1.01 pounds per hour.
- (c) The VOC emissions from the Dideon rotary drum shakeout process shall not exceed 3.66 pounds per hour.

Compliance with these limits in combination with the production limit on the cupola, will render the requirements of 326 IAC 8-1-6 (BACT) not applicable to these facilities.

### **Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

### **Compliance Monitoring**

This foundry has applicable compliance monitoring conditions as specified below:

- (a) Visible emission notations of all of the controlled stack exhausts and of the cupola charge door shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) A continuous monitoring system shall be calibrated, maintained, and operated on the

cupola for measuring temperature of the cupola gas stream. The output of this system shall be recorded as an hourly average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the hourly average temperature of the cupola gas stream is below 1300 °F. This minimum temperature requirement applies at all times during cupola operation, except for the following:

- (1) periods when the cupola blast air is turned off;
- (2) periods when the blast air has been turned on for less than 30 consecutive minutes; and
- (3) during the last 30 minutes of operation of the cupola.

An hourly average temperature that is below 1300 °F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

The Permittee shall monitor the times that the cupola blast air is turned on and off.

The Permittee shall determine the hourly average temperature from the most recent valid stack test that demonstrates compliance with limits in condition D.2.2, as approved by IDEM.

On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the hourly average temperature of the cupola gas stream is below the hourly average temperature as observed during the compliant stack test. An hourly average temperature that is below the hourly average temperature as observed during the compliance stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

- (c) The Permittee shall record the total static pressure drop across each of the baghouses used in conjunction with the foundry processes at least once per shift when the associated process is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range specified in the permit or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instruments used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

Note: For the baghouse controlling the cupola, a pressure drop range of 4 to 18 is specified as the normal range in this permit. The reason IDEM has approved the use of such a wide normal range is because Fountain Foundry submitted a letter from BHA Group stating that they have determined this to be the normal range for this baghouse.

- (d) An inspection shall be performed within the last month of each calendar quarter of all

bags controlling the foundry processes. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

- (e) In the event that bag failure has been observed.
  - (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
  - (2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (f) The Permittee shall keep records of the throughput of metal to the cupola. A quarterly report of this information shall be submitted to IDEM using the reporting forms attached to the permit.
- (g) Within 90 days after the first day of restarting operation of the cupola after the date of issuance of this Part 70 permit, the Permittee shall perform PM, PM10, and CO testing using methods as approved by the Commissioner, in order to demonstrate compliance with conditions D.2.1 and D.2.2 of the permit. Restarting operation is considered to have occurred at the time that the cupola begins operation for any reason after the date of issuance of this Part 70 permit. These tests shall be repeated at least once every two and a half (2.5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.
- (h) Within 180 days after the issuance of this permit, the Permittee shall perform PM and PM10 emissions testing on baghouse #1 controlling the south turntable pouring and cooling, the Dideon rotary drum shakeout, and the south sand handling processes, utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensible PM10 emissions.
- (i) Within 180 days after the issuance of this permit, the Permittee shall perform PM and PM10 emissions testing on baghouse #2 controlling the 14 cubic foot shotblast machine, the 34 cubic foot shotblast machine, the shakeout table system, and the old foundry sand handling system, utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensible PM10 emissions.

These monitoring conditions are necessary because the control devices must operate properly in

order to ensure compliance with 326 IAC 6-3-2, 326 IAC 5-1, and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

### **Air Toxic Emissions**

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations.

### **Conclusion**

The operation of this gray and ductile iron foundry shall be subject to the conditions of the attached proposed Part 70 Permit No. T045-6006-00001.

Company Name: Fountain Foundry Corporation  
Plant Location 215 East VanBuren Street, Veedersburg, IN 47987  
County: Fountain  
Permit Reviewer: Nisha Sizemore  
Permit #: T045-6006-00001

### PSD Applicability Analysis

For units constructed prior to 1977:

Process	Max Cap (tons/hr)	Control	Control Eff (%)	PM EF (lb/ton)	PM Emissions (tons/yr)	PM10 EF (lb/ton)	PM10 Emissions (tons/yr)	SO2 EF (lb/ton)	SO2 Emissions (tons/yr)	NOx EF (lb/ton)	NOx Emissions (tons/yr)	VOC EF (lb/ton)	VOC Emissions (tons/yr)	CO EF (lb/ton)	CO Emissions (tons/yr)	lead EF (lb/ton)	lead Emissions (tons/yr)
scrap and charge handling for cupola	9	none		0.6	23.65	0.36	14.19	0	0.00	0	0.00	0	0.00	0	0	0.0029	0.11
cupola	9	baghouse afterburner	98% 90%	13.8	10.88	12.4	9.78	1.25	49.28	0.1	3.94	0.18	7.10	145	571.59	0.03174	0.03
Old foundry pouring	9	none		4.2	165.56	2.06	81.21	0.02	0.79	0.01	0.39	0.14	5.52	0	0	0.02	0.79
Old foundry cooling	9	none		1.4	55.19	1.4	55.19	0	0.00		0.00		0.00		0		0.00
magnesium treatment	1.5	none		1.8	11.83	1.8	11.83	0	0.00		0.00		0.00		0		0.00
shotblast 14 cf	2	baghouse	99%	17	1.68	1.7	0.17	0	0.00		0.00		0.00		0		0.00
shotblast 34 cf	5.6	baghouse	99%	17	4.71	1.7	0.47		0.00		0.00		0.00		0		0.00
grinders	7.6	baghouse	99%	0.01	0.00	0.005	0.00										
Old foundry sand handling	5.8	baghouse	99%	3.6	1.03	0.54	0.16		0.00		0.00		0.00		0		0.00
shakeout table system	5	baghouse	98%	3.2	1.50	2.24	1.05	0	0.00	0	0.00	1.2	26.28	0	0	0.01	0.00
Totals					276.04		174.03		50.06		4.34		38.89		571.59		0.93

Emissions of PM and PM10 are above major source thresholds. However, the Permittee now wishes to accept production limits on these units in order to make the source a minor source as of 1977 when the PSD rules became effective. That way, the next modification in 1989 would be allowed limits of 99 tons/yr. The following table shows the production and emission limits that are necessary in order for total emissions to be limited to less than 100 tons/yr.



Process	Production Limit (tons/yr)	Control	Control Eff (%)	PM Limit (lb/ton)	PM Emissions (tons/yr)	PM10 Limit (lb/ton)	PM10 Emissions (tons/yr)	SO2 Limit (lb/ton)	SO2 Emissions (tons/yr)	Nox Limit (lb/ton)	NOx Emissions (tons/yr)	VOC Limit (lb/ton)	VOC Emissions (tons/yr)	CO Limit (lb/ton)	CO Emissions (tons/yr)	lead limit (lb/ton)	lead Emissions (tons/yr)
scrap and charge handling for cupola	13600	none		0.60	4.08	0.36	2.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0029	0.02
cupola	13600	baghouse afterburner		0.21	1.41	0.19	1.26	14.52	98.74	0.10	0.68	0.18	1.22	14.56	99.01	0.004	0.03
Old foundry pouring	26740	none		4.20	56.15	2.06	27.54	0.02	0.27	0.01	0.13	0.14	1.87	0.00	0.00	0.02	0.27
Old foundry cooling	26740	none		1.40	18.72	1.40	18.72	0.00	0.00		0.00		0.00		0.00		0.00
Total Emissions					80.36		49.97		99.00		0.81		3.10		99.01		0.31

Note: For the Old Foundry pouring and cooling, no production limit needs to be specified in the permit. This is because the only melt processes at the plant are the cupola which has a limit of 13,600 ton/yr and the EIF which has a max cap of 13,140. Therefore, the Old foundry process is bottlenecked at 26,740 tons/yr by the melt process and no production limit is necessary.

The following unit was also constructed prior to 1977, and the Permittee wishes to accept a limit in lbs/hr.

Process	Production Capacity (tons/yr)	Control	Control Eff (%)	PM Limit (lb/hr)	PM Emissions (tons/yr)	PM10 Limit (lb/hr)	PM10 Emissions (tons/yr)	SO2 Limit (lb/ton)	SO2 Emissions (tons/yr)	Nox Limit (lb/ton)	NOx Emissions (tons/yr)	VOC Limit (lb/ton)	VOC Emissions (tons/yr)	CO Limit (lb/ton)	CO Emissions (tons/yr)	lead limit (lb/hr)	lead Emissions (tons/yr)
magnesium treatment	13140			2.70	11.83	2.70	11.83	0	0		0		0		0	0.0594	0.26

Note: There is no production limit necessary for the magnesium treatment process. The 13,140 tons/yr represents the maximum capacity of the magnesium treatment process.

All of the following units are controlled by baghouse #2 and were constructed prior to 1977; therefore the permit establishes one lb/hr limit for baghouse #2.

Process	Production Capacity (tons/hr)	Control	Control Eff (%)	PM Limit (lb/hr)	PM Emissions (tons/yr)	PM10 Limit (lb/hr)	PM10 Emissions (tons/yr)	SO2 Limit (lb/ton)	SO2 Emissions (tons/yr)	Nox Limit (lb/ton)	NOx Emissions (tons/yr)	VOC Limit (lb/ton)	VOC Emissions (tons/yr)	CO Limit (lb/ton)	CO Emissions (tons/yr)	lead limit (lb/hr)	lead Emissions (tons/yr)
shotblast 14 cf	2	baghouse						0	0		0		0		0		
shotblast 34 cf	5.6	baghouse							0		0		0		0		
grinders	7.6	baghouse															
Old foundry sand handling	5.8	baghouse							0		0		0		0		
shakeout table system	5	baghouse						0	0	0	0	1.2	0.003	0	0		
Totals				1.55	6.79	8.49	37.19		0.00		0.00		0.00		0.00	0.0047	0.021

Totals for all units constructed prior to 1977:					98.97		98.98		99.00		0.81		3.10		99.01		0.60
---	--	--	--	--	-------	--	-------	--	-------	--	------	--	------	--	-------	--	------

For all units constructed in 1989:

Process	Max Cap (tons/hr)	Control		PM EF (lb/ton)	Uncontrolled PM Emissions (tons/yr)	PM10 EF (lb/ton)	Uncontrolled PM10 Emissions (tons/yr)	SO2 EF (lb/ton)	Uncontrolled SO2 Emissions (tons/yr)	NOx EF (lb/ton)	Uncontrolled Nox Emissions (tons/yr)	VOC EF (lb/ton)	Uncontrolled VOC Emissions (tons/yr)	CO EF (lb/ton)	Uncontrolled CO Emissions (tons/yr)	lead EF (lb/ton)	Uncontrolled lead Emissions (tons/yr)
south pallet pouring	3.2	none		4.2	58.87	2.06	28.87	0.02	0.28	0.01	0.14	0.14	1.96	0	0	0.02	0.28
south pallet cooling	3.2	none		1.4	19.62	1.4	19.62	0	0.00		0.00		0.00		0		0.00
south pouring turntable	4	baghouse		4.2	73.58	2.06	36.09	0.02	0.35	0.01	0.18	0.14	2.45	0	0	0.02	0.35
south cooling turntable	4	baghouse		1.4	24.53	1.4	24.53	0	0.00		0.00		0.00		0		0.00
South sand handling	28.8	baghouse		3.6	454.12	0.54	68.12		0.00		0.00		0.00		0		0.00
shakeout Dideon	9	baghouse		3.2	126.14	2.24	88.30	0	0.00	0	0.00	1.2	47.30	0	0	0.01	0.39
Totals					756.86		265.53		0.63		0.32		51.72		0		1.02

Emissions of PM before controls would be above major source thresholds. However, the Permittee now wishes to accept limits on these units in order to make PSD not applicable to this 1989 modification. Additionally, VOC emissions would be above 25 tpy triggering the applicability of 326 IAC 8-1-6. The Permittee also wishes to accept a limit of less than 25 tpy to render 326 IAC 8-1-6 not applicable.

Process	Production Limit or max capacity (tons/yr) or (tons/hr)	Control	Control Eff (%)	PM EF (lb/ton)	PM Emissions (tons/yr)	PM10 EF (lb/ton)	PM10 Emissions (tons/yr)	SO2 EF (lb/ton)	SO2 Emissions (tons/yr)	NOx EF (lb/ton)	NOx Emissions (tons/yr)	VOC EF (lb/ton)	VOC Emissions (tons/yr)	CO EF (lb/ton)	CO Emissions (tons/yr)	lead EF (lb/ton)	lead Emissions (tons/yr)
south pallet pouring	26740 tons/yr	none		4.2	56.15	2.06	27.54	0.02	0.27	0.01	0.13	0.14	1.87	0	0.00	0.02	0.27
south pallet cooling	26740 tons/yr	none		1.4	18.72	1.4	18.72	0	0.00		0.00		0.00		0.00		0.00
south pouring turntable		baghouse	97%	4.2	0.00	2.06	0.00	0.02	0.00	0.01	0.00	0.14	0.00	0	0.00	0.02	0.00
south cooling turntable		baghouse	97%	1.4	0.00	1.4	0.00	0	0.00		0.00		0.00		0.00		0.00
South sand handling	28.8 tons/hr	baghouse	97%	3.6	13.62	0.54	2.04		0.00		0.00		0.00		0.00		0.00
shakeout Dideon	26740 tons/yr	baghouse	97%	3.2	1.28	2.24	0.90	0	0.00	0	0.00	1.2	16.04	0	0.00	0.01	0.00
Totals					89.78		49.20		0.27		0.13		17.92		0		0.27

Note: For the pouring and cooling, no production limit needs to be specified in the permit. This is because the only melt processes at the plant are the cupola which has a limit of 13,600 ton/yr and the EIF which has a max cap of 13,140. Therefore, the total amount of metal poured is bottlenecked

at 26,740 tons/yr by the melt process and no production limit is necessary.

In order to render 326 IAC 8-1-6 not applicable, VOC allowable emissions in the permit will be stated at less than 25 tons/yr.

The Permittee has chosen to accept a limit of 3.66 lb/hr (16 tpy) for the shakeout operation and 1.01 lb/hr (4.42 tpy) for each pouring/cooling operation.

All of the following units are controlled by baghouse #1 and were constructed in 1989; therefore the permit establishes one lb/hr limit for baghouse #1.

Process	Production Capacity (tons/yr)	Control	Control Eff (%)	PM Limit (lb/hr)	PM Emissions (tons/yr)	PM10 Limit (lb/hr)	PM10 Emissions (tons/yr)	SO2 Limit (lb/ton)	SO2 Emissions (tons/yr)	Nox Limit (lb/ton)	NOx Emissions (tons/yr)	VOC Limit (lb/ton)	VOC Emissions (tons/yr)	CO Limit (lb/ton)	CO Emissions (tons/yr)	lead limit (lb/hr)	lead Emissions (tons/yr)
south pouring turntable		baghouse	97%		0.00		0.00	0.02	0.00	0.01	0.00	0.14	0.00	0	0		0.00
south cooling turntable		baghouse	97%		0.00		0.00	0	0.00		0.00		0.00		0		0.00
South sand handling		baghouse	97%		0.00		0.00		0.00		0.00		0.00		0		0.00
shakeout Dideon		baghouse	97%		0.00		0.00	0	0.00	0	0.00	1.2	0.00	0	0		0.00
Totals				5.51	24.13	12.04	52.74		0.00		0.00		0.00		0.00	0.074	0.32
Totals for all units constructed in 1989:																	
					99.01		99.00		0.27		0.13		1.87		0.00		0.59

The EIF and the charge handling process servicing the EIF were both constructed in 1994.

Process	Max Cap (tons/hr)	Control	Control Eff (%)	PM EF (lb/ton)	PM Emissions (tons/yr)	PM10 EF (lb/ton)	PM10 Emissions (tons/yr)	SO2 EF (lb/ton)	SO2 Emissions (tons/yr)	NOx EF (lb/ton)	NOx Emissions (tons/yr)	VOC EF (lb/ton)	VOC Emissions (tons/yr)	CO EF (lb/ton)	CO Emissions (tons/yr)	lead EF (lb/ton)	lead Emissions (tons/yr)
scrap and charge handling for EIF	1.5	none		0.6	3.94	0.36	2.37	0	0.00	0	0.00	0	0.00	0	0	0.0029	0.02
electric induction furnace	1.5			0.9	5.91	0.86	5.65	1.25	8.21	0.1	0.66	0.18	1.18	145	952.65	0.0023	0.02
Totals					9.86		8.02		8.21		0.66		1.18		952.65		0.03

PM and PM10 emissions are limited to less than 25 tpy and 15 tpy respectively. This is equivalent to 5.68 lb/hr and 3.40 lb/hr respectively.

Lead emissions are limited to less than 0.6 tpy which is equivalent to 0.135 lb/hr.

### 326 IAC 6-3-2 Analysis

Process	Maximum Capacity (tons/hr)	Process Weight Rate (tons/hr)	Control	Control Eff (%)	PM EF (lb/ton)	PM Emissions (tons/yr)	PM Emissions (lbs/hr)	6-3-2 Limit (lbs/hr)
scrap and charge handling for cupola	9	9	none		0.6	23.65	5.40	17.9
cupola	9	9	baghouse	98%	13.8	10.88	2.48	17.9
Old foundry pouring	9	77.4	none		4.2	165.56	37.80	75.6
Old foundry cooling	9	77.4	none		1.4	55.19	12.60	75.6
magnesium treatment	1.5	1.5	none		1.8	11.83	2.70	5.4
shotblast 14 cf	2	2	baghouse	99%	17	1.68	0.38	6.5
shotblast 34 cf	5.6	5.6	baghouse	99%	17	4.71	1.08	13.0
Old foundry sand handling	5.8	5.8	baghouse	99%	3.6	1.03	0.24	13.3
shakeout table system	5	43	baghouse	98%	3.2	1.50	0.34	51.0
south pallet pouring	3.2	27.52	none		4.2	58.87	13.44	37.8
south pallet cooling	3.2	27.52	none		1.4	19.62	4.48	37.8
south pouring turntable	4	34.4	baghouse	97%	4.2	2.21	0.50	43.9
south cooling turntable	4	34.4	baghouse	97%	1.4	0.74	0.17	43.9
South sand handling	28.8	28.8	baghouse	97%	3.6	13.62	3.11	39.0
shakeout Dideon	9	77.4	baghouse	97%	3.2	3.78	0.86	75.6
EIF scrap and charge handling	1.5	1.5	none		0.6	3.94	0.90	5.4
electric induction furnace	1.5	1.5	none		0.9	5.91	1.35	5.4